

**PAPERS ON INDIAN STATES  
DEVELOPMENT**

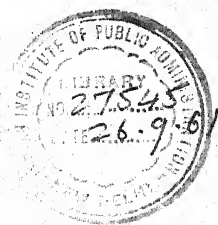


# PAPERS ON INDIAN STATES DEVELOPMENT

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## FOREWORD

BY SIR GILBERT VYLE

OPPORTUNITY ! It is the fashion of the time to sigh for it and to recall the good old days of the Merchant-Adventurers, the Conquistadores, the Nabobs, the Forty-niners, or simply "pre-war," when a man of initiative, determination, and resource could earn a living. And yet I cannot believe that the present is any less fruitful of opportunities than the past. I do not observe that successful men of today behave as if opportunities were only to be discovered in museums. But neither do they sit still and wait for opportunity to open the office door and deliver the order with cash in advance.

I suppose the fundamental principle of business is : Find out what the people want and give it them, of the highest possible quality and at the lowest possible price. The man who discovers a new want creates a new industry. He is a public benefactor. So is he who fills an existing want more adequately than it has been filled before.

What we need, therefore, is more knowledge about each other. We hear a great deal about "lost markets," and, indeed, the merchant or manufacturer may survey the world literally from China to Brazil and find it a gloomy prospect. And if anyone were to tell him that there exists, within the British Empire, an area eight times the size of Great Britain, with a population the size of Germany, ripe for economic development, possessed of vast natural resources, and yet almost unknown and commercially almost unscratched, he simply would not believe it.

Yet it is true. The Indian States, which are not part of British India, whose peoples are within the Empire but are

not British subjects, whose rulers are "sovereign" but in close treaty alliance with the British Crown (wherein the writ of Congress does not run), which have been left in the background but which are now being rediscovered by statesmen as a number of *terræ firmæ* in the quicksands of Indian politics—these States are such an area. Politically they provide a problem without precedent or analogy. Economically they offer unexampled opportunities.

It was to discover facts about the States, their history, their problems, their prospects and their possibilities that the Indian States Business Group was formed some time ago. That Group had the advantage of listening to papers read by men having first-hand knowledge of the States; and it is with the object of giving wider publicity to the contents of those papers that this volume has been compiled. I wholeheartedly commend it to all those, whether they be statesmen, politicians, merchants, manufacturers, or merely men-in-the-street, by whose wants and activities all the others are set and maintained in motion and even in being. I think its contents will be to them, as they were to me, a revelation of opportunity both for statesmanship and commerce.

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# INDIAN STATES DEVELOPMENT

## CHAPTER I

### A POLITICAL SURVEY OF SEVENTY YEARS

BY PROFESSOR L. F. RUSHBROOK WILLIAMS

THE Indian Mutiny, and in particular the circumstances of its suppression, exercised a profound influence upon the destiny of the Indian States. The manner in which the great majority of the Princes and Chiefs held loyal to their word came, perhaps, as no surprise to those Englishmen who knew them best; but the value of the aid which they gave us at the most critical juncture of our fortunes caused us to form a juster conception of their political importance than had been current for a quarter of a century. With the exception of the contingents furnished by Nepal and the Punjab States, the military assistance rendered by the Princes was less vital to us than their moral support. Contemporary artists found some pleasure in contrasting with the smart, well-disciplined troops of the Queen and of the Company the somewhat casually equipped and leisurely-minded contingents of "our Native allies." Yet these same contingents, by patrolling stretches of country far more extensive than could be covered by our own troops, not merely saved the lives of hundreds of our fugitive countrymen, but also assured to our lines of communication a security which they could not otherwise have possessed. It was, nevertheless, from the "moral" as opposed to the "physical" aspect of the rebellion that the loyalty of the Indian States proved of its greatest value. The Indian Princes were recognized by many even of the inhabitants of British India as their natural leaders; and the attitude which these leaders adopted sufficed in many cases to secure the friendly neutrality of parts of the

country far removed from their own borders. In the words of Lord Canning, these patches of Native rule acted as breakwaters to the wave which might otherwise have swept us utterly away.

On the part alike of our statesmen in England and of our administrators in India, there was a desire to give full expression to Britain's appreciation of the services which the Indian Princes had rendered in the hour of crisis. In the proclamation of Queen Victoria the Princes find conspicuous mention :

" We hereby announce to the Native Princes of India that all treaties and engagements made with them by or under the authority of the East India Company are by us accepted and will be scrupulously maintained, and we look for the like observance on their part.

" We desire no extension of our present territorial possessions ; and while we will permit no aggression upon our dominions or our rights to be attempted with impunity, we shall sanction no encroachment on those of others.

" We shall respect the rights, dignity and honour of Native Princes as our own : and we desire that they, as well as our own subjects, should enjoy that prosperity and that social advancement which can only be secured by internal peace and good government."

These carefully chosen words are worthy of close study, for they amount to a considered exposition of the policy henceforth to be pursued towards the Indian States.

The first paragraph is of fundamental importance, for the Crown's confirmation and acceptance of the treaties and engagements at this juncture was something far more significant than a purely formal act. Constitutionally, the treaties and engagements to which the Indian States had been parties had always been, despite the accidents of language, with the Crown ; for it was only by virtue of authority expressly delegated to it by the Crown for the purpose that the Company had been legally competent to execute treaties at all. But it cannot be denied that the change which had taken place in the relative resources of the contracting parties since the majority of the treaties and engagements had been concluded was of a kind to entitle the Crown, had it so desired, to choose an occasion,

in legal phraseology, to "denounce" these contracts, and to substitute for them engagements more in keeping with the quasi-absolute authority which a Paramount Power might be supposed entitled to exercise over State units so much weaker than itself. Not merely was the justification for such action, according to well-known principles of the Law of Nations, plain and obvious;\* but, in addition, the occasion itself was to hand. In assuming the direct government of British India, the Crown was setting up a new system altogether for the discharge of its responsibilities towards the people of that country. Thus, had it designed to effect any alteration in the ancient system of relationship between itself and the Indian States, it could not have failed to seize the occasion of accomplishing its end. The fact that it not only did not do so, but went out of its way, as it were, to confirm the existing treaty relationship, must therefore be taken as the declaration of positive and deliberate policy. So far from recognizing the corroding influence which lapse of time and changed circumstances might seem to have exerted upon the treaties and engagements since their conclusion, the Crown expressly reverted to the documents themselves, reaffirmed their continued validity, and on its own behalf called for their strict observance. It therefore deprived itself, both for the present and for the immediate future, of the advantage of raising the plea that the treaties and engagements were binding upon itself only in so far as they were consistent with later usage or present circumstances. It is perhaps in this sense alone that the historian can find any justification for Lord Curzon's notable pronouncement that in regard to the rights of the Indian States "the Crown has itself laid down the limitations of its own prerogative." The Crown did, in fact, lay down these limitations; but it did so at a time and in a manner which were intended to make these limitations not susceptible of variation at its pleasure.

\* Phillimore: "Three Centuries of Treaties of Peace," 137 *seq.*



The second paragraph amounts to a formal repudiation of the so-called Doctrine of Lapse, as well as a recognition of the distinction between territories of the Crown in British India and the territories of its allies in the Indian States. It set at rest once and for all the apprehensions of the Indian dynasties that with the efflux of time their States were likely to be absorbed in British India, and it answered the question regarding the future of the Native States which had for some decades been exercising the minds of British administrators. For the Native States were henceforth recognized as constituting a permanent element in the political composition of India considered as a whole. From this time forward, indeed, there were in law as well as in practice two Indias. In British India the Crown's writ ran, the inhabitants were British subjects. In "Indian India" the justice dispensed was the States' justice, the people were the subjects of the Prince who ruled over them. (Moreover, as was later made clear in official communications by the Government of India to the League of Nations, an international obligation accepted by that Government is not *proprio vigore* binding upon the Indian States without their consent, if its application entails an infringement of those rights of internal autonomy which the Crown has bound itself by treaty and engagement to respect.\*)

The effect of this paragraph was further reinforced by Lord Canning's distribution of "Sanads of Adoption" to some hundred and forty of the more important States in 1861. These sanads recognized the right of the Ruling Houses to adopt heirs on the failure of the direct line. They did not confer this right, which was, in fact, part of the personal law of the Princes concerned and of the constitutional custom of the States; but they declared the

\* *E.g.*, Reservation made in the Sixth Committee of the Assembly of the League of Nations by Sir William Vincent in respect of the Indian States (Slavery Convention signed at Geneva September 25, 1926, page 6).



intention of the British to observe in their dealings with the States the recognized Indian, and not the Western feudal, practice. In other words, the issue of the adoption sanads was a declaration of policy rather than the conferment of a privilege; and their acceptance by the States concerned could introduce no new legal element into the existing relationship between these States and the Crown. The Indian Princes themselves were in no doubt that such was the true interpretation; as the present Maharaja of Bikaner said in 1916, the sanads "merely recognized the absolute right of an Indian Ruler to name and appoint his own successor. It was the disregard of the inheritance code and custom of Indian rule that contributed to the trouble during the régime of Lord Dalhousie: it was the sympathy and farsightedness of our good Queen Victoria that recognized and promised unbroken the continuity of our ancient usage" (Conference of Princes, 1916).

The third paragraph, quoted from the Proclamation, is interesting—first, as recognizing the distinction between "the Native Princes" and the Queen's subjects; secondly, as indicating the attitude which British Sovereigns have henceforth always assumed in their personal dealings with their Indian allies; thirdly, as expressing the Crown's hopes for the welfare and advancement of the Indian States, as well as of British India. Unfortunately, however, the work confronting the Crown's servants during the next half century in the latter territory was so gigantic that there remained comparatively little energy to spare for the delicate and difficult task of promoting the interests of the States in a manner consistent with the Crown's declared policy towards them.

From the standpoint of the States, therefore, the assumption by the Crown of the governance of India was a matter rather of changed policy than of altered law. The Crown had alike the power and the opportunity to modify beyond all recognition the ancient relationship, founded upon treaties and engagements, which bound it to the States.

But it deliberately refrained from making any such modification. Lord Canning's description of the situation implies no such change in the constitutional relation between the Crown and the States, as has sometimes been read into it.

"The Crown of England," he said, "stands forth the unquestioned ruler and Paramount Power in all India and is for the first time brought face to face with its feudatories. There is a reality in the suzerainty of the Sovereign of England which has never existed before and which is not only felt but eagerly acknowledged by the Chiefs."\*

It was unfortunate that the misleading analogy of Western feudalism was still suffered to influence official terminology; but British administrators in India, then as now, were more concerned with facts than with their true interpretation.† In a despatch dated April 30, 1860, Lord Canning proceeded to lay down two principles of considerable importance.‡ The first was that the integrity of the States was to be preserved by the perpetuation of the rule of the Princes, whether through adoption or otherwise; the second was that flagrant misgovernment must be prevented or arrested by timely exercise of intervention. Reasonable as these principles appear to be, their enunciation seems to mark the beginning of that tendency, which later became a professed policy of the Indian Political Department, to read the treaties as a whole; to lay down general maxims of "political practice" which were to be applied to all States regardless of the precise character of the individual engagements which bound each State to the Crown; and, as an inevitable consequence, to apply to the greater States those conveniently elastic interpretations of British authority which were strictly applicable, if at all, only to the lesser units. It must, however, be noticed that, despite the loyalty shown by the great majority of States during

\* Lee Warner : "Native States of India," 28 *seq.*

† Montagu-Chelmsford Report, ch. x.

‡ Canning's Despatch, April 30, 1860.

the Mutiny, there was no attempt to modify the old policy of isolating each State from its fellows. Indeed, the Crown's emphatic confirmation of the Treaties and Engagements carried with it as a necessary consequence, in the absence of any specific relaxation, the continued fission of Indian India. It may perhaps have been that the officials in India, suddenly struck by the reality of the influence so loyally cast in our favour in 1857, showed signs of reverting to that earlier attitude of suspicion, not unmixed with fear, which had marked the early days of the Company's emergence from equality with, to supremacy over, the other powers in India. With the growth of that easy confidence in the power and permanence of the British Raj which characterized the outlook of the ordinary official in India in the two decades preceding the Mutiny, the former attitude towards the States had been superseded by one of half-contemptuous indulgence. But the shock of the Mutiny caused a reversion to the older policy of suspicion, against which Lord Canning himself pleaded in vain. "Should the day come," he wrote, "when India shall be threatened by an external enemy, or when the interest of England elsewhere may require that her Eastern Empire shall incur more than ordinary risk, one of our best mainstays will be found in these Native States. But to make them so we must treat their Chiefs with consideration and generosity, teaching them that in spite of all suspicions to the contrary, their independence is safe, that we are not waiting for plausible opportunities to convert their country into British territory." These wise words seemed all too quickly forgotten. Ten years after the crisis from which the Maharaja Scindia emerged so honourably, Lord Lawrence is found ordering the break-up of "Scindia's little Army"\* and its dispersal about the country, and forbidding the assemblage of troops in the capital upon such a large scale in the future.

Lord Lawrence, in fact, proved himself at the end, as

\* Report of Central India Agency, 1866-67.

in the stormy middle of his career, an uncompromising opponent of "all measures for increasing the consequence of, and placing trust in, the native chiefs and gentry generally."\* But the declared policy of the Crown was unmistakable; and Lord Lawrence in general confined himself to haranguing the chiefs at his Darbars "on the evil of infanticides and the blessings of female education."† In the case of Tonk, however, more serious action seemed called for. Among the feudatories of that State was the Thakarate of Lawa. In 1867 a murderous attack was made upon the uncle and followers of the Thakar, and the Government of India were convinced that the Nawab of Tonk was responsible. Doubtless, with justification, the Nawab was deprived of his sovereign powers. But Lord Lawrence went further, and in spirit, if not in letter, departed from the declaration of Queen Victoria less than a decade after it had been pronounced. For the State of Tonk was not merely deprived of its suzerain rights over the Thakarate, but Lawa was ordered in future to pay its tribute to the British Government instead of to Tonk. Thus to derive from the personal misdeeds of a particular Ruler an excuse for penalizing alike his successors and his State in favour of the Paramount Power was an innovation which certainly no one today would defend. Lord Lawrence's inherent predisposition towards the old policy of aggrandizing British India at the expense of the States was further displayed in his desire to bring to an end the Ruling House of Mysore. In 1868 the Maharaja died, after twenty-seven years of retirement, and it was in the face of the Viceroy's wishes that the adopted son of the deceased was acknowledged as his successor. A Regency administration was set up in the name of the six-year-old boy; but if Lawrence's advice had been followed, the State of Mysore would have become a part of British India.

\* Letter of Lord Canning, 1860.

† Keene.

From the time of Lord Lawrence also there may be traced the growth of a disposition on the part of the Political Department to intervene more and more in those details of the domestic economy of the States which, under the terms of the majority of treaties and engagements, were matters for the States themselves. The post-Mutiny appreciation of the influence and importance of the States manifested itself in a reversion to the policy, formerly tried and abandoned, of confining the office of Chief Minister (Diwan) in all important administrations to individuals who were *persona grata* with the authorities in Calcutta. The Government of India persistently asserted its right to veto any nomination of which it did not approve, but in such States as Hyderabad, Gwalior and Indore, the vigilance of trained administrators like Salar Jung, Dinkar Rao and Madhava Rao, made such elastic interpretations of the rights of paramountcy more difficult. However, when once the Political Department came to adopt as a working rule the proposition that the rights possessed by the Government of India over any given State were limited only by that Government's discretion, it is plain that the relations between that State and the Crown was placed on a basis not contemplated in the 1858 Proclamation. Whether a State could resist what it regarded as encroachments upon its rights henceforth came to depend in practice principally upon the personality of its Ruler and the ability or otherwise of his Ministers.

Unfortunately for the States, there were interests, both political and economic, which urged the Government of India to extend its authority in many directions not previously contemplated by either party. On the one side, the Government's jealousy of the power of the States was very real, and inclined it to weaken them by every means in its power. During the Viceroyalty of Lord Mayo, who succeeded Lord Lawrence in 1869, the Commander-in-Chief, Lord Napier, wrote as follows to the Home Government: "There are considerable forces under the Native



Chiefs, who may be individually friendly, but whose troops can never be relied on not to join against us. Our military force at Gwalior is much inferior in strength to that which Scindia could bring against it, and nothing but the possession of the fort could justify our position at Morar, even with the garrison originally appointed for it. We are aware that the Deccan, Central India, and the Border States of Rajputana, such as Kerowlee and Kotah, could furnish larger bodies of men than those which gave such ample occupation to General Stewart's, and afterwards to Sir Hugh Rose's and Sir John Mitchell's, forces. We know that Holkar has a foundry and makes good guns for his own amusement. We do not know how many may be made in other places, but we may be certain that guns will not be wanting whenever there are people to use them."

In the light of such an expression of opinion, it may occur to the historian to conjecture that the wisest policy would have been to render effective the loyalty of the Princes by strengthening their internal sovereignty, by refraining from humiliating them in the eyes of their subjects, and by encouraging them to suppress all subversive elements within their territories—in a word, to follow the wise counsels of Lord Canning. But it was long ere this lesson was learned, and meanwhile it seemed to British administrators that safety lay in securing the prevalence of their will over the will of the Indian States, both in the political and in the economic spheres. The fact that many States were in political relations with Provincial Governments undoubtedly facilitated the process; for Provincial Governments tended to concentrate more upon their own local needs and requirements, and to treat the susceptibilities of the States less tenderly, than did the Government of India. That the influence thus acquired was exercised with benevolent intentions cannot be doubted. But in some cases at least too little stress was placed upon those State rights which the Crown had undertaken, in the most absolute terms, to preserve; and too much upon the

obligations, whether real or adventitious, which the States were alleged to owe to the Paramount Power. The Princes found themselves helpless. They were not permitted to correspond with each other; they had no facilities for common action in defence of their common rights. With rare exceptions, they tended to become supine, and even timid, in the face of an authority which they were powerless to resist.

Lord Mayo, despite the charm of manner which endeared him personally to many Ruling Princes, was an enthusiastic exponent of the policy of Westernizing the States and bringing them to that level of development which characterized those portions of India which were under British Rule. He interested himself in promoting the education of the rising generation of Princes by setting on foot the creation of Chiefs' Colleges at Ajmere and Rajkot. He also devoted much attention to guiding the administration of States whose Rulers were minors, and to utilizing the opportunities thus afforded to promote the construction of railways and of roads. Unfortunately the financial necessities, and still more, perhaps, the economic ideas of the Government of India, were such as to cause it occasionally to drive somewhat hard bargains, which have subsequently become grievances in the eyes of certain States. In particular, insistence upon the cession by States Governments of land required for railway construction, and acquisition of the lease of the great Sambhar salt-lake, led to the formulation of a policy which sacrificed the economic interests of many States to those of British India. There was nothing Machiavellian about such ideas as those which animated British administrators at this time. Their responsibility for the interests of British India was direct and real; their responsibility for the interests of the States was indirect and shadowy. The increasing centralization of the Indian administration, the gradual knitting of British India into a single economic unit, naturally pointed the contrast between the great territories

of the Queen and the small scattered States of her subordinate allies. The interests of the greater came inevitably, in the absence of any real acceptance of constitutional limitations upon the authority of the Paramount Power, to outweigh the interests of the less.

Apprehensive as they were of the power of the States, it was natural that the British should fortify by every means in their power the political prestige and economic stability of British India vis-à-vis Indian India.

How helpless even a powerful State found itself, in face of the policy of the Government of India, is illustrated by the trial and deposition of Mulhar Rao Gaekwad of Baroda, in the time of Lord Mayo's successor, Lord Northbrook. This Prince was accused of an attempt to poison the British Resident. A Commission of Enquiry was appointed, upon which sat the Maharajas of Gwalior and Jaipur, Sir Dinkar Rao, and three Englishmen. The three Indians found the charges "not proven"; the three Englishmen took the opposite view. The charges were accordingly not pressed, the Gaekwad being deposed on the ground of general maladministration. Such a step was probably justified upon the letter of the treaty of 1802 and the subsequent undertaking of the then Gaekwad that if he or his successors committed anything improper or unjust the British Government should interfere.\* But the action of Government aroused uneasiness in many other States; and the whole course of the proceedings lent colour to the idea that the British authorities, quite independently of the Treaties and Engagements, saw justification for any treatment they might mete out to the States, in the fact that such treatment was right in their own eyes. In passing, it should be noticed, the Government of India's experience of referring charges against a Prince to a Commission upon which other Indian States were represented did not encourage it to

\* Aitchison, viii. 89. Westlake ("Collected Papers on International Law," ch. xix.) was ignorant of this; and his defence of the action of Government is thus as unnecessary as it is unconvincing.



persevere with the plan. For many years to come that Government continued to be both prosecutor, judge, and jury when the conduct of a Prince came into question.

An interesting sidelight upon the treatment of the Ruling Princes at this time is forthcoming from the pen of no less a person than the future King Edward VII., who as Prince of Wales visited India in 1875-76. Writing to her Majesty in November, 1875, the Prince remarked: "What struck me most forcibly was the rude and rough manner with which the English Political Officers (as they are called, who are in attendance on Native Chiefs) treat them. It is indeed much to be deplored, and the system is, I am sure, quite wrong."\*

It may be questioned whether, of all the debts which the British Empire owes to its Sovereigns, the effect produced upon the disquieted minds of the Indian Princes by the gracious interest and personal kindness of successive Monarchs should not be ranked among the greatest.

It was probably the experience of the Prince of Wales in India which finally crystallized the project, for long discussed, of the assumption by Queen Victoria of the title Empress of India. In the words of Lord Lytton, who became Viceroy in 1876, the Royal Titles Act was the commencement of a new policy "by virtue of which the Crown of England should henceforth be identified with the hopes, the aspirations, the sympathies, and interests of a powerful native aristocracy." The change in the Royal Title, while gratifying to the sentiments of the Princes, did not, as the Prime Minister (Mr. Disraeli) plainly asserted in the debate of March 14, 1876, affect the rights, dignity, and honour as guaranteed by the Proclamation of 1858. There are, in fact, no grounds for assuming that the Royal Titles Act made any change in the relationship between the Crown and the Indian States, or that it conferred upon the Crown any more authority over its allies than had previously vested in it. But it undoubtedly encouraged some British

\* Sir Sidney Lee: "King Edward VII.," i. 399.

administrators to justify the policy of asserting the *force majeure* of the Paramount Power in a fashion subordinating the interests of the States to the interests of the Queen-Empress's territory, by claiming that the Mughal Emperors, whose title the Crown had now assumed, were accustomed to do the same thing.\* Apart from the fact that Mughal practice was fluctuating and that the Emperors of that House lost during the eighteenth and early nineteenth centuries any rights over the States which they might conceivably under different circumstances have been capable of transmitting to the British, both the Company and the States alike, at latest from the date at which Warren Hastings repudiated the tribute owed to the Delhi Court (1773), had arranged their mutual affairs, had legislated for their own territories, and had concluded alliances with each other, as though the Mughal Empire had passed out of existence. Moreover, the British had bound themselves to the States by solemn Treaties and Engagements, which Queen Victoria had confirmed; and it was this bond, and not any alleged inheritance of Mughal authority, which must be held to regulate the relations between the parties before as well as after the Royal Titles Bill. But the personal homage which many Princes paid to the Empress's representative at the Delhi Durbar of January 1, 1877, if in the legal and constitutional spheres without effect upon the position of the Indian States, undoubtedly cemented the tie of personal loyalty between the British Sovereign and the Indian Rulers, which has been among the happiest features of the Indo-British connection.

Lord Lytton, while unwilling to afford the States protection against the steady persistent limitation of an internal sovereignty whose integrity had been solemnly guaranteed to them, recognized to the full their political importance. In a letter written to Lord Salisbury in January, 1877, he discusses, without propounding, the dilemma in which the Government of India found itself. The States were

\* Cf. Tupper and Lee Warner.

powerful : yes. They were loyal : certainly. They must be secured and utilized. But they were not to be trusted "with power independent of our own"—not even with that measure of power, it would seem, for which they were entitled under their engagements to look.

"I am convinced," Lord Lytton wrote, "that the fundamental political mistake of able and experienced Indian officials is the belief that we can hold India securely by what they call good government—that is to say, by improving the condition of the ryot, strictly administering justice, spending immense sums on irrigation works, etc. Politically speaking, the Indian peasantry is an inert mass. If it ever moves at all, it will move in obedience, not to its British benefactors, but to its Native Chiefs and Princes, however tyrannical they may be. . . . Look at the mistakes which Austria made in the government of her Italian provinces; they were the best governed portions of Italy. She studied and protected the interests of the native peasantry, but, fearing the native *noblesse*, she snubbed and repressed it. When that *noblesse*, having nothing to gain or hope from the continuation of her rule, conspired against it, the peasantry either remained passive or else followed the lead of its national superiors in attacking its alien benefactors. But the Indian Chiefs and Princes are not a mere *noblesse*; they are a powerful aristocracy. To securely, completely, and efficiently utilize the Indian aristocracy is, I am convinced, the most important problem before us. I admit that it is not easy of immediate solution. For whilst on the one hand we require their cordial and willing allegiance, which is dependent on their sympathies and interests being in some way associated with the interests of the British Power, on the other hand we certainly cannot afford to give them any increased political power independent of our own. Fortunately for us, however, they are easily affected by sentiment and susceptible to the influence of symbols to which facts may imperfectly correspond."

It was in accordance with his analysis of the psychology of the Indian Princes that Lord Lytton designed to establish orders of Indian nobility and an Indian Privy Council. Neither of these projects produced any lasting result; but it is well known that the grant of honours and the gradation of salutes have proved powerful instruments for conveying to the world the approval or the displeasure of the Paramount Power towards individual Rulers, whose reputation in the eyes of their peers has tended to rise or fall accordingly. But the question as to whether it was or was not sound policy, even from the most limited standpoint, to teach Indian Rulers to look rather to the British Government than to the opinion of their subjects for praise or for blame seems never to have been seriously considered. Meanwhile, the policy of concluding hard bargains with individual States, in such economic matters as the Government Salt Monopoly, was being pursued with all the great influence, moral and physical, which the British had at their disposal.

It must be noticed that in one particular, with the single exception of the sequestration of Lawa, the policy adumbrated in 1858 was most loyally observed. The territorial aggrandizement of British India at the expense of the States was now in reality a thing of the past; and the Indian Princes felt that whatever might be the pleasure of the Paramount Power in regard to the individual Ruler, the dynasty at least was secure in its place. During the Viceroyalty of Lord Ripon the "rendition" of Mysore, with which Lord Salisbury's name is inseparably associated, provided a striking object lesson of British good faith.

In 1881 the minor adopted heir of the last Maharaja came of age; and the great State to which Government had conditionally acknowledged his title was handed over to him. The legal document known as the Instrument of Transfer is worthy of study, for it embodies the principles which those responsible for the conduct of the Crown's relations with the States desired to apply to their task.

No previous engagement bound their hands : Mysore was in their gift; the conditions of the Maharaja's rule were theirs to frame. Accordingly, they proceeded to assert in every detail the paramount authority of the Government of India. No succession to the throne was to be valid until recognized by the Governor-General-in-Council, who was further empowered to select an heir on the failure of the direct lineage. The Maharaja and his successors were to perform all duties which might be demanded of them in virtue of allegiance and subordination. The State was to pay an annual tribute of rupees 35 lakhs in return for protection; no fortress was to be repaired or built and no arms imported without Government's sanction. Lands required for railway or telegraph construction were to be given free of charge; the State was to comply with the wishes of Government in regard to salt and opium policy. The laws in force at the time, and the general system of administration, were not to be changed without the consent of Government. The Maharaja was bound to conform to such advice as might be given him by the Governor-General-in-Council "with a view to the management of his finances, the settlement and collection of his revenues, the imposition of taxes, the administration of justice, the extension of commerce, the encouragement of trade, agricultural industry, and any other objects connected with the advancement of His Highness's interests, the happiness of his subjects, and his relations with the British Government."

All these were doubtless wise and statesmanlike provisions; and their application to the State of Mysore was, on constitutional grounds, unexceptionable. But when it is realized that they summarize the most authoritative ideas of the age regarding the policy which ought to guide the actions of Political Officers in their dealings with the Indian States as a whole,\* it can hardly be denied that the Political

\* In only one instance—namely, the "Instrument of Transfer" given by Lord Ripon to Mysore in 1881—has even an attempt been made to



Department had by this time strayed rather far from the lines laid down in Queen Victoria's proclamation. To apply such a policy to a State revived and brought into new existence by the British was one thing; to apply it to States whose rights of internal sovereignty had been recognized was quite another.

The policy of courteous conciliation, coupled with tenacious insistence upon the will of the Government in the minutest particular, continued to characterize our dealings with the States during the Viceroyalty of Lord Dufferin. He initiated the practice of paying official visits to the States, with the happiest consequences to the personal relations between the Indian Princes and the Empress's representative. He restored to Scindia the famous fort of Gwalior in exchange for the town of Jhansi; and he received gratifying proof of the loyalty of the Princes in the shape of the offers of assistance which poured in at the time of the war scare with Russia in 1885. Yet the dealings of his Government with the State of Kashmir—a long and complicated story, the full details of which have never been made public—suffice to show that in the last event even the most powerful Ruler was considered to hold his throne only by sufferance of the Paramount Power—a sufferance which might at any moment be transformed by ill-founded suspicion or personal misunderstanding into well-nigh implacable opposition. In the case of Kashmir, only the bare facts are clear. In 1885 and the following years, owing to apprehensions of Russian intrigue in the Pamirs, a British Resident was appointed to the Court of Kashmir, and proposals were made to bring the frontier areas of the State under the control of the Government of India. In 1888 the Maharaja was accused of correspondence with the Russians and of plotting murder. The accusations were dropped as obviously baseless, but on other grounds he was deprived of his powers and a State Council was set up

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embody all obligations (*i.e.*, of the States towards the Crown) in a single document (Lee Warner: "The Native States of India," pp. 28 *seq.*).

under the virtual control of the Resident. Immediately the Maharaja lost his powers, the Gilgit Agency was brought into existence and the political control of a large area of Kashmir State passed into the hands of the British.

When Lord Lansdowne succeeded Lord Dufferin in 1888 he took up the practical working of the scheme of Imperial Service Troops initiated by his predecessor. As a result of the spontaneous offers of men and money made by such Princes as the Nizam of Hyderabad, following upon the Frontier tension of 1885, Lord Dufferin had asked "those Chiefs who have specially good fighting material in their armies to raise a portion of those armies to such a pitch of efficiency as will make them fit to go into action side by side with Imperial Troops"; and the States, without regard to the fact that their constitutional position placed the responsibility of their defence upon the shoulders of the Paramount Power, had gladly responded. Lord Lansdowne now laid down principles for the guidance of his Government in accepting or rejecting the offers of assistance. "The essence of the whole matter," he wrote, "is that there should be no compulsion in the matter, that only those States should be singled out which are not only willing but anxious to bear their part with us in defending the Empire in the hour of need." This policy was on the whole consistently observed; and though there have been unfortunate instances of direct pressure upon certain States, such as Lord Curzon's attempt to coerce Rewa, the history of the Imperial Service Troops has been a happy one. The Princes felt that the old attitude of suspicion was passing away; that their "little armies" were regarded as buttresses of British power rather than as potential foci of armed resistance. The result has been wholly good; and the system has continued to develop until, as a consequence of experience in the Great War, it has reached its present culmination in the Indian States Forces, which are a valuable adjunct to the external defence as well as to the internal security of India as a whole. The gradual change

in the attitude of the British administrators towards the Indian States is illustrated by the words used by Lord Lansdowne in the course of a speech delivered at Hyderabad :

“I have always recognized the advantages of the arrangement under which a considerable portion of the Indian Empire continues to be governed by its hereditary Rulers, and to be subject to powers of administration differing to a considerable extent from our own, but inspired by our proximity and stimulated by our example. No one would be more averse than I should be to any change in our relations with the Native States inconsistent with the measure of local autonomy which they now enjoy.”

The most notable incident in the history of Lord Lansdowne's dealings with the States was provided by the case of Manipur, whose inhabitants were warlike, turbulent, and in some areas only semi-civilized. Disputes broke out within the State, which led to the deposition of the Maharaja. The British intervened, recognized the new Ruler, but demanded the expulsion of the uncle who had placed him on the throne. An attempt to enforce this order caused such resentment that after an armistice had been agreed upon, five British officers who were prepared to attend a conference were treacherously seized and executed. An armed expedition avenged the outrage, and those responsible were arrested and brought to trial. The counsel for the defence took the line that the rulers of Manipur, an independent State, were not liable to be brought to trial for waging war against the Queen. The contention was obviously untenable; for Manipur, like other States, owned certain definite duties to the Crown—duties which had been violated by the action recently taken. The authorities responsible for these actions had obviously to be punished. But the Government of India was on more doubtful ground when, while bringing State Officials to book, it also proceeded to punish directly certain individuals who had done nothing save obey the orders of



the established administration in Manipur. "The degree of subordination," ran the Government Resolution of August 21, 1891, "in which the Manipur State stood towards the Indian Empire has been more than once explained in connection with these cases; and it must be taken to be proved conclusively that Manipur was a subordinate and protected State which owed submission to the Paramount Power, and that its forcible resistance to a lawful order, whether it be called waging war, treason, rebellion, or by any other name, is an offence the commission of which justifies the exaction of adequate penalties from individuals concerned in such resistance as well as from the State as a whole. The principles of international law have no bearing upon the relations between the Government of India as representing the Queen-Empress on the one hand, and the Native States under the suzerainty of Her Majesty on the other. The paramount supremacy of the former presupposes and implies the subordination of the latter. In the exercise of their high prerogative the Government of India have, in Manipur, as in other protected States, the unquestioned right to remove by administrative order any person whose presence in a State may seem objectionable. They also had the right to summon a Darbar through their political representative for the purpose of declaring their decision upon matters connected with the expulsion of the ex-Maharaja, and if their order for the deportation of the Senapati\* were not obeyed, it was this Officer's duty to take proper steps for his forcible apprehension. In the opinion of the Governor-General-in-Council, any armed and violent resistance to such arrest was an act of rebellion, and can no more be justified by a plea of self-defence than could resistance to a police officer armed with a Magistrate's Warrant in British India. The Governor-General-in-Council holds, therefore, that the accused persons were liable to be tried for waging war against the Queen."

\* Commander-in-Chief.

This passage is of interest as exhibiting the views of Government at that date of its power over the Indian States, but otherwise possesses no importance. For it is obvious that in so far as the contentions put forward by Government were well founded, they derived their validity, not from this assertion of them, but from engagements by which each individual State, formally or informally, had consented to divest itself of sovereignty in favour of the Paramount Power. Contentions not so grounded derived no authority from the mere assertion of the Government of India of its intention to exercise by *force majeure* without the consent of the States rights which did not, in fact, vest in it. The point that it takes two parties to agree to a contract had by this time been allowed to disappear from the political practice of the Government of India; and the inherent contradiction between the whole spirit of the Manipur Resolution and the policy laid down by Queen Victoria is too obvious to require emphasis. Finally, it is to be noticed that Government's declaration regarding the non-applicability of the principles of international law to the relations between the Crown and the States, while it has misled many textbook writers, is very vulnerable to the test of fact, quite apart from the question whether Government was or not competent to issue *ex parte* a declaration which would be binding upon the States as well as upon itself.

During the Viceroyalty of Lord Elgin, there is no event of importance to record in the relations between the Indian States and the Paramount Power; but in the time of his successor, Lord Curzon, who became Viceroy in 1898, the high-water mark of the Government of India's assertion of claims over the States was reached. He took a personal interest in non-British India, and visited some forty States. Thoroughly convinced of the political importance, actual and potential, of the Indian Princes, he did his best, in his masterful way, to enlist them in the interest of the Government over which he presided. Speaking at Gwalior in 1899, he said :

"The Native Chief has become, by our policy, an integral factor in the Imperial organization of India. He is concerned not less than the Viceroy or the Lieutenant-Governor in the administration of the country. I claim him as my colleague and partner."

Admirable as this attitude may appear, it failed, in fact, to elicit the expected response: and this for a very simple reason. Lord Curzon ignored the fact that the terms of "partnership" had been laid down in Queen Victoria's proclamation: that the Princes remembered their Treaties and Engagements even though the Political Department might have neglected them. The "partnership" which he postulated implied complete subordination of the States in all matters. In his view, the relations of the States with the Crown "conformed to a single type." "The sovereignty of the Crown," he proudly said at Bahawalpur, "is everywhere unchallenged. It has itself laid down the limitations of its own prerogative." This was true enough; but these limitations on occasions had been overlooked by the Crown's agent, the Government of India. In the view of that Government, however, and of the eminent statesman who then presided over it, the limitations in question meant that British administrators could exercise over the States those powers that seemed to them right and proper.

Indeed, considering the high standards of integrity and intelligence that have generally characterized the Political Department, there is much to be said in defence of such an attitude. Nearly half a century had elapsed since the Mutiny, and the Government of India could point with pride to the advancement of the Indian States, both economically and politically. Well-ordered administrations, road and railway policies, hospitals, schools, canals, security of person and of property—such were some of the fruits of fifty years of tutelage. Indeed, the foundations were solidly laid; and the majority of States faced the dawn of the twentieth century in a stronger position than they had previously known. But the price paid by the States for a

process over which they had little control was no light one. They found themselves well-nigh helpless in face of a Paramount Power which was as autocratic in action as it was benevolent in intention. Isolated one from the other, discouraged from corresponding except through the medium of their Political Officers, unable to secure the observance of Treaties and Engagements to their satisfaction, the Indian Princes regarded with dismay the tendencies of the time. While on the one hand they observed Lord Curzon sternly setting his face against the valuable privileges—free houses, free conveyances, and other multitudinous perquisites—which had gathered round Political Officers accredited to the Courts of various Princes, they saw on the other his public issue of peremptory circulars forbidding Indian Rulers to leave India without the Viceroy's permission.

But relief was at hand. It was gradually becoming plain that in British India itself there were limits to the autocracy, no matter how benevolent, which an alien government could safely exercise. The Nationalist movement in British India had been steadily gaining ground; the claim of the governed to be associated more directly with the conduct of their Government struck with increasing force upon British ears. Lord Curzon's restless energy stirred up a storm of opposition in British India: Government found its hands fully occupied with its own immediate responsibilities. The time was ripe for a relaxation of the rigid and meticulous supervision over the States which was gradually coming to be recognized as a cause of legitimate resentment on the part of Britain's staunchest friends in India.

The Viceroyalty of Lord Minto (1905-11) marks a turning-point in the history of the dealings of the Government of India with the States. While there was to be for more than a decade no admission by that Government that its actions had, in fact, transgressed in important particulars the limitations imposed upon it by the Treaties and



Engagements, there was from this time forward a disposition to exercise its powers in harmony with, rather than regardless of, the susceptibilities of the States. In a speech delivered at Udaipur in 1909, Lord Minto declared: "I have made it a rule to avoid the issue of general instructions as far as possible, and have endeavoured to deal with questions as they arose with reference to existing treaties, the merits of each case, local conditions, antecedent circumstances, and the particular stage of development, feudal and constitutional, of individual principalities." Another passage reveals even more plainly the character of the new ideas: "The foundation-stone of the whole system is the recognition of identity of interests between the Imperial Government and the Durbars, and the minimum of interference with the latter in their own affairs. . . . I can assure Political Officers I am speaking in no spirit of criticism. . . . My aim and object will be, as it always has been, to assist them; but I would impress upon them that they are not only the mouthpiece of Government and the custodian of Imperial policy, but that I look to them also to interpret the sentiments and aspirations of the Durbars."

The change was not, however, complete.

"Our policy," Lord Minto said, "is, with rare exceptions, one of non-interference in the internal affairs of Native States. But in guaranteeing their internal independence and in undertaking their protection against external aggression, it naturally follows that the Imperial Government has assumed a certain degree of responsibility for the general soundness of their administration, and would not consent to incur the reproach of being an indirect instrument of misrule. There are also certain matters in which it is necessary for the Government of India to safeguard the interests of the community as a whole as well as those of the Paramount Power, such as railways, telegraphs, and other services of an Imperial character. But the

relationship of the Supreme Government to the States is one of suzerainty."

It had at this time scarcely occurred to the Government of India to consider whether the correct procedure in these "Imperial" matters did not lie rather along the road of diplomatic negotiation than of administrative fiat. The Princes were well aware that the Government of India was exercising powers to which, in their view, it had no title save that of force. How far the process had been carried may be judged from a statement made by a high authority some ten years later. "Lieut.-Col. Holland proceeded to observe that there had been in the past a constant development of constitutional doctrine under the strain of new conditions as the British Power had welded the country into a composite whole. That doctrine, as, for instance, in the case of extra-territorial jurisdiction, railway and telegraph construction, administration of cantonments, and various other matters, had been superimposed upon the original relations of many States with the Crown, but had evolved in harmony with the needs of the Indian body politic and had not been inspired by any desire to limit the sovereign powers of the Indian Rulers. The Rulers' consent to such new doctrine had not always been sought in the past, partly because it was often evolved piecemeal from precedents affecting individual States, and partly because it would have been impracticable to secure combined assent within a reasonable period. It was admitted, however, that while the justice and necessity of the new measures were clearly seen, their effect upon the treaty position was not appreciated at the time, with the result that a body of usage influencing the relations with the States had come into force through a process, which, though benevolent in intention, was nevertheless to some extent arbitrary."\*

But seeing no possibility of effective resistance, the Princes contented themselves with protests designed to

\* Proceedings of a Conference, September 22, 1919.

make clear the fact that these encroachments upon the autonomy, guaranteed to them by the Treaties, were, in certain directions at least, carried through without their assent. Meanwhile, they welcomed wholeheartedly the manner in which Lord Minto took them into his confidence, consulted them upon such matters as the spread of sedition in British India, and listened with sympathy real, if not always effective, to the grievances which they desired to lay before him. He completed his conquest of their hearts by the re-establishment of the State of Benares. As a result, at the time when the difficulties of the British in India were increasing, Lord Minto firmly cemented the ancient loyalty of the Indian States.

Lord Minto's successor, Lord Hardinge, continued the process of calling into consultation the leading Princes. Imperceptibly, but effectively, the old ban upon conferences and assemblages of Rulers for discussion of common interests was replaced by a more liberal policy. The magnificent response of the Indian Princes to the needs of the Empire in 1914 and the following years, and the strain of war, served to exhibit both the power of the Princes and their abiding loyalty to the British Crown. Lord Chelmsford, who succeeded Lord Hardinge in 1915, not only took the Princes fully into his confidence, and enlisted them effectively as his colleagues in the prosecution of the War, but in addition encouraged them to formulate proposals for placing the policy of the Government of India upon a footing more satisfactory to themselves. Such encouragement was, indeed, only the logical corollary to a growing realization that in British India itself the time had come to formulate a policy of relaxing control, Indianizing the services, and advancing towards the goal of responsible government. The spirit animating Mr. E. S. Montagu's declaration of August 20, 1917, concerning British India, necessarily implied a change in policy towards the Indian States.

When Mr. Montagu and Lord Chelmsford proceeded

jointly to investigate the conditions of British India, the Indian States did not entirely escape their attention. In Chapter X. of their Report, the distinguished authors frankly admitted that the position required attention. "The practice appropriate to the minor Chiefs has been used in the case of the major ones," they said. They recognized also that the Princes had the right to claim a voice in matters which jointly concerned British India and Indian India. They considered that the Government of India ought not, in case of dispute with a State, to be at once party and judge. They examined sympathetically a scheme submitted by the Princes' Conference which provided for an Assembly of Princes to discuss common interests, an Advisory Board to influence the actions of the Political Department, and a system of arbitration to secure the equitable settlement of disputes between State and State and between State and Government. Unfortunately, in the stress of post-war politics, British attention was concentrated almost exclusively upon British India. The recommendations of the Montagu-Chelmsford Report in regard to the Indian States were relegated to the background, for the Princes had no means of bringing their claims prominently to public attention. The principal result of such pressure as they were able to exert by means of their Conferences, now regularly held, was the institution in 1921 of the Chamber of Princes, under restrictions which made it a very imperfect instrument for the discharge of the functions with which the Indian Rulers had desired to entrust it. It has, however, provided a basis for common action; and its annual sessions have been made the occasion for a parallel system of "Informal Meetings" at which important business is transacted, and mandates given to the elected Chancellor and elected Standing Committee jointly constituting the executive of the whole body of Princes. But the formal character of the proceedings of the Chamber itself, combined with the difficulty of overcoming, within a few short years, the spirit of separatism which we had



deliberately declined for a century to discourage, have handicapped the rapid growth of joint action among the Princes. Despite all these disadvantages, the political influence of the Chamber has steadily grown. It has turned its attention not only to negotiations with the Government of India for the protection of State interests and the assertion of State rights, but also to the encouragement of good administration and sound policy within the States themselves. In the year 1929 it took the courageous step of admitting the Press and the public to its deliberations, and from that time onwards it has constituted a real and increasing force in the general politics of India. Its activities are in large measure responsible for the growing realization among the leaders of Parliamentary and public opinion in England that the Indian States exist, that they constitute a separate factor in Indian politics, that they have grievances which ought to be redressed just as they have rights which cannot safely be ignored, and that they manifest a loyalty to the British connection which is among the strongest links in the tie between Great Britain and India.

This brief survey would be incomplete without reference to two outstanding documents. The first is the Report of the Indian States Committee, which was published in February, 1929. The Indian States Committee was appointed as a result of representations made to Lord Irwin, then Viceroy of India, by the Chancellor and Standing Committee—who together constitute the annually elected executive—of the Chamber of Princes. Struck by the general uncertainty of their position, and anxious that that position should be defined prior to the approaching adjustment of relations between British India and Great Britain, an important body of Rulers and representatives of Indian States met Lord Irwin in conference early in the year 1927. They urged the desirability of an investigation into the relations between the Indian States and the Paramount Power, and into the financial and economic relation-

ship between the Indian States and British India. Their original request for a comprehensive inquiry to be conducted by an elaborate and representative Commission was not acceded to; but a small Committee of experts, under the chairmanship of Sir Harcourt Butler, was appointed to survey the general position. The Committee found that the relationship between the Indian States and the Paramount Power was a relationship with the Crown; that the Treaties and Engagements were binding as between the State which had concluded them and the Crown; that the relationship thus constituted was individual to each State, and therefore that the Treaties could not be read "as a whole"; and the Crown ought not, without the consent of the States, to divest itself of this relationship in favour of any Government responsible to a purely British Indian electorate. The Committee also found that the Government of India was not justified in imposing British Indian financial interests upon the States, where those interests and the interests of the States threatened to conflict. The Committee recommended that in future the Viceroy, as the King's personal representative, should be the Crown's agent for the transaction of the relationship between the Crown and the States; and that the particular financial grievances of which the States complained should be investigated by Committees of Inquiry. On the other hand, the Committee did not admit any consistent or clear-cut limitation upon the powers of Paramountcy; and while it found that sovereignty was divided as between the Crown and the Indian States, it failed to draw any dividing-line. And although it recommended the process of Arbitration, rather than of executive decision, in matters which arose between the Crown and a State, it did not propose the creation of any impartial Tribunal, to which resort could be had as a matter of right. It further failed to recommend any scheme by which the Indian States might make their voice heard in matters which were of common concern to the whole of India. Broadly speaking, the Indian States were

disappointed at the upshot of the Inquiry, in preparing for which they had expended a great deal of labour and a considerable amount of money.

The second of the two documents to which reference has been made is the Report of the Statutory Commission presided over by Sir John Simon, which was published in June, 1930. This Report, although it dealt primarily with the constitutional position in British India, marked an epoch in the history of the relations between the Indian States and the British Crown. For in the process of his Inquiry, Sir John Simon became convinced "of the importance of bearing in mind the relations which may develop between British India and the Indian States." He therefore suggested first that the scope of the Statutory Commission should take the wider range of including an examination of the methods by which the future relationship between the two constituent parts of Greater India may be adjusted, and, further, that the Indian States should be represented at a conference, which would include also representatives of British India and of His Majesty's Government, in order that the greatest possible measure of agreement might be sought for the final proposal which would be submitted to Parliament. These suggestions were accepted by the Prime Minister (Mr. Ramsay MacDonald). The Report of the Statutory Commission, when published, proceeded to lay great emphasis upon the importance of the Indian States. The Commissioners found that Federation represented the only practicable line of advance along which India could ultimately obtain a position of equality with the self-governing Dominions of the Crown. In such a Federation they recognized the States must have a place; but they further proceeded to emphasize that the Indian States could not be compelled to enter a Federation, but must join it only when and in so far as they desired to do so. From the standpoint of the Indian States, the Report of the Statutory Commission marks a distinct advance upon the findings of the Indian States Committee. The right of

the States to be consulted upon a variety of important matters, now for the first time recognized as "matters of common concern" and not matters for settlement according to British Indian opinion alone, was clearly admitted. The Report further found that the time had come for the erection of some permanent machinery for consultation between the Indian States and British India, and suggested a device, to be known as the Council for Greater India, which might make such consultation practicable. The Statutory Commission also recognized, in certain important directions, that the Treaty relationship between the Crown and the Indian States imposed definite limitations upon the Crown's freedom to act without the consent of the States. Finally, the proposals of the Report admitted the right of the States to be considered as free negotiating parties at the Round Table Conference to be summoned towards the close of the year 1930.

The Indian States, through their representatives, signified at an early date their willingness to attend the projected Conference. Further, while they criticized the Recommendations of the Statutory Commission's Report in matters of detail, they accepted the Federal idea which forms the basis of the whole recommendation. They have now an opportunity, such as never has occurred in the past, both of vindicating their ideas as to their own rightful position, and of making a constructive contribution towards the building up of the Greater India of the future.

## CHAPTER II

### THE DEVELOPMENT AND RESOURCES OF THE MYSORE STATE

BY B. T. KESAVAIENGAR

(First Trade Commissioner in London for the Mysore Government)

HAVING recently taken up the appointment of Trade Commissioner in London for the Mysore Government, I readily accept the invitation to contribute an article upon the above subject to the ASIATIC REVIEW. It is scarcely necessary for me to mention that Mysore is one of the largest of the Indian States, being the same size as Scotland, with an area of 29,475 square miles and a population of over six millions. The administration is conducted under His Highness's control by an Executive Council consisting of the Dewan and three Members of Council. There are two constitutional bodies to assist in the work of administration—viz., the Representative Assembly and the Legislative Council.

Before writing of Mysore's economic development, I should make special and reverent mention of the high character, saintly life, and noble aspirations of our beloved Ruler, His Highness Sir Sri Krishnaraja Wadiyar Bahadur, G.C.S.I., G.B.E., and the keen sympathy he has for the progress of his people. During the quarter of a century of his benign rule, the advance of Mysore has been so marked in all directions that it is universally acknowledged as a model State. In certain respects the State has gone further than British India in evolving schemes for the development of the resources of the State and for the material and moral progress of the people. Half a century ago, before ideas of constitutional reform were being shaped in British India, Mysore was the first Indian State, indeed the first part of India, where a genuine attempt was made to associate



the people in the work of administration. The Representative Assembly—a body of persons elected by people in rural areas—was first established in 1881 with a view to enable the representatives of the people to approach the Government with local grievances and problems, and to suggest measures for the development of the resources of the State. This body was nurtured carefully by successive administrators, able and far-seeing, and placed on a statutory basis about ten years ago. Mysore has been evolving and carrying out beneficent schemes during all these years under the benevolent and fostering guidance of the Ruler, assisted by eminent statesmen. There is now a Legislative Council with a non-official majority with powers similar to those of the Legislatures in the provinces of British India.

In addition to these two constitutional bodies there is another Council, which, though not established under statute, has been doing very useful service. This Council is known as the Mysore Economic Conference. It was inaugurated by His Highness in 1911 with the object of associating men of enlightenment, public-spirited citizens, prominent agriculturists, merchants, etc., with the officers of Government in deliberations connected with economic progress in Mysore. It was considered that problems relating to wealth creation should receive special treatment as distinct from those of general administration, and the solution of many of them could only be attempted by the joint action of the Government and the people.

The activities of the Economic Conference led, among other results, to a large expenditure on education, the establishment of the University of Mysore and of the Bank of Mysore, the creation of the Department of Industries, and the starting of several industries, large and small.

#### THE GOLD FIELDS

Of the various activities that have brought Mysore into close contact with the West, not the least important is the development of the mineral resources of the State. Mysore,

as many business people in this country are aware, is rich in mineral wealth and has afforded ample scope for the investment of capital by people in this country to exploit the mineral wealth. The chief mineral which attracted the attention of the Western capitalist so early as 1873 was gold, the well-known Kolar Gold Fields being situate in the Mysore State.

The existence of the remains of old workings had long been known, but it was not till 1873 that any special attention was directed to them. In that year Mr. Lavelle, a resident of Bangalore, applied to the Mysore Government for the exclusive privilege of mining in the Kolar district. On experimenting he found that large capital would be required for carrying out the work, and he transferred all his rights and concessions to the late Major-General G. de la Poer Beresford. This officer, with some friends, formed a syndicate known as the Gold Fields of Mysore Company. The Company subsequently secured the aid of Messrs. John Taylor and Sons, Mining Engineers, of London, in 1880, who since then have developed the industry with such energy, enterprise and business insight that it has been going on to this day with persistent vigour to the mutual advantage of the capitalists and the State.

The importance of this enterprise to the State has a two-fold aspect. Apart from the royalty the State derives from the mining operations, the revenue realized by the sale of electric energy supplied to the industry is considerable, being as much as 80 per cent. of the total revenue derived.

The industry has accordingly enjoyed the active support of the Mysore Government, which has financed the construction of a branch railway and installed a plant for supply of electric power generated at the Cauvery Falls, ninety-three miles away. Besides this, the Government have provided a filtered water supply to the mining area. The Mining Board has the privilege of sending a member to the popular assembly to represent mining interests. The largest consumers of power in the State are the Kolar Mines, and with



the ever-increasing depths (the present depth of some of the mines goes up to 6,800 feet) the demand for power supply will increase, and it is in the interests of the State that this industry should go on as far as it can and as long as it can. The total quantity of fine gold produced from the commencement of the mining operation in 1882 up to the end of the year 1927 was well over 15½ million ounces, valued at over £67,000,000, the dividends paid exceeding £21,000,000.

#### OTHER MINERAL RESOURCES

The other mining ventures in the State include manganese, chromium, magnesite, and iron. Of these the extraction and transport of manganese ore on a large scale has been in the hands of a company in England—viz., The Workington Iron and Steel Company, combined with the United Steel Company, Ltd. The quantity of ore exported till the end of 1925 amounted to 591,000 tons, the royalty realized thereon being a little over Rs. 2½ lakhs. The company have their own narrow gauge line for a length of about forty miles, and have done much useful service to the country by opening up a somewhat unhealthy tract in the hilly regions of the State, and by providing labour to the unemployed in that region.

The future development of this industry in India will largely depend on the future of the iron industry, and this is a problem beset with many difficulties, not the least important of which are competition and the costly nature of railway transport and heavy steamer freight.

Chrome ore is another mineral, the extraction of which has received attention during recent years, and the future of the industry is promising. A high-grade ore is available, and the manufacture of ferro-chrome, experiments in regard to which are being carried on, will no doubt prove to be a useful enterprise in the State. Till 1925 the quantity of ore extracted amounted to 191,851 tons, and in 1927-28 26,115 tons were mined.

### THE MYSORE IRON WORKS

The Mysore Iron Works were started by the Government of His Highness the Maharaja, in order to utilize the mineral and forest resources of the State and to establish a basic industry of national importance. The works are situated on the banks of a perennial river close to a railway station on the Birur-Shimogra section of the Mysore Railways. There is an abundant supply of iron ore on the Bababudan hills, which lie within a distance of about twenty-five miles. The ore is brought down to the foot of the hill by a steel ropeway three miles long operated by gravity. The forests in the neighbourhood are worked for fuel. The plant occupies an area of about fifty acres, and comprises a modern charcoal blast furnace, a pipe foundry, a wood distillation and by-product recovery plant. An experimental steel plant has been added to it recently.

The Bhadravati Iron Works are the only works of their kind in India and in the East, and they possess the biggest wood distillation plant in the British Empire. The by-products comprise C.P. methanol, methyl acetone, calcium acetate, and wood-tar and tar products. The revenue from these by-products is considerable, and is a very important offset against the high cost of charcoal pig-iron which is the main product. The blast furnace is capable of a maximum output of 28,000 tons per year, and the disposal and utilization of this large output is engaging the earnest efforts of the authorities with a view to maintaining the industry in a state of permanent efficiency and for developing other lines connected with this industry.

Competition in the market, overproduction in iron and steel, together with the cost of transport, weigh heavily against the rapid development of this industry, and in the interests of the country a certain measure of further protection would seem necessary to foster its growth.

In order to improve the revenue prospects of the undertaking, and to manufacture articles in local demand, the

investigation of some new developments is receiving the attention of Government. These relate to the supply of cheaper electric power, the manufacture of steel and steel products, the manufacture of pulp and paper, and the manufacture of acetic acid, bakelite, and other chemical products.

Copper and antimony ores are also available, and prospecting is going on to investigate the possibilities of working these minerals on a commercial basis.

Besides these important minerals, there are a few abrasive and refractory minerals, the development of which is receiving more and more attention. Of these magnesite is one and bauxite another. There are also available minerals of construction such as limestone, lime kankar, ornamental and building stones. These are not of much interest from the point of view of external trade, as they are worked for the present for local absorption.

#### FORESTRY

The forest resources are another equally important item of the State's wealth, and the development of the work of the Department on scientific lines has always received the closest attention of the Government. The forests under direct Government control reach a total area of 3,500 square miles. The forests contain many valuable species of timber. The value of timber sold by the Forest Department annually is about Rs. 10 lakhs. There are over seventy-five varieties of timber in Mysore forests, many of which are suited for high-class furniture and ornamental work, and there are several varieties locally absorbed for house-building purposes. There are certain varieties of timber growing in the hilly tracts of the State close to the borders of the Western Ghats which would be of great value in Western countries, but the cost of their exploitation and transport is so prohibitive that they are allowed to decay in the primeval forests.

Much of the timber extracted from the forests is used

locally for building purposes. There is, I think, sufficient scope for enterprising firms to start furniture factories in areas where good and cheap timber is available, to manufacture goods, if not for export, at least to meet local demand. It would, of course, mean a careful study of the furniture requirements of an Eastern country, where the needs and tastes are different from those in this country, and hence affording scope for enterprise. There are timbers suitable for the match industry, and a beginning has been made by the establishment of a match factory at Shimoga in the State. A good deal of heavy timber is supplied for lining the shafts and for supports on the Kolar Gold Fields, and a certain quantity is used for railway purposes as sleepers.

At the Mysore Iron Works a creosote plant has recently been added to treat the ordinary and cheaper varieties of timber to make them fit to be used as sleepers and building material. The plant has been doing good work since its installation, and is likely to prove a useful adjunct for the utilization of the forest resources.

Special reference requires to be made to the sandalwood in the State forests, the wood being a monopoly of the State. Till about 15 years ago, the wood itself was being auctioned in India. It was long known that a valuable essential oil could be had from the wood. The Government realized the advantage of distilling oil from the wood locally, and decided to provide employment to the people of the land by starting the Sandalwood Oil Factory in Bangalore. A few years later another factory also was established in Mysore. The factory deals with nearly 1,500 to 2,000 tons of wood annually, and the oil produced is of an exceptionally good quality and finds a favourable and ready market in the countries of Europe. The oil is used in the perfumery, soap and medicinal trades. The total quantity of oil produced is about 200,000 lbs. annually. The wood is available only in limited quantities, and there is little prospect of increasing the output in the near future,

although sufficient oil will be made available to maintain a steady market for the oil.

A start has been made in lac cultivation, and the industry is being carefully nursed with a view to its further expansion. Sealing wax, button lac and lac polish are being manufactured at present, and when sufficient progress has been made, trade with the West in these commodities will naturally develop, and it is hoped will prove to be profitable.

### HYDRO-ELECTRIC POWER

With its mineral, forest, and other natural resources and the availability of cheap electric power, Mysore is happily circumstanced in regard to schemes for the development of industries both large and small. Till twenty years ago, however, there were but few factories manufacturing on a large scale. It was given to the hydro-electric installation on the Cauvery River at Sivasamudram to transform the entire industrial outlook in the State. The story of the development of power at the Cauvery Falls in Mysore is a fascinating one and would deserve a separate treatment for itself.

The scheme started in 1902 owes its origin to the genius and foresight of one of the foremost of Mysore's statesmen and administrators: I refer to the great Dewan, Sir K. Seshadri Iyer. The scheme has grown from small beginnings to such enormous proportions that it has become an invaluable industrial asset of the State. It was originally designed to generate 10,000 h.p., and as the demand for power increased, fresh generation plants had to be added, with the result that when the summer supplies in the river ran low the continuity of power supply became precarious in these months and the construction of a storage reservoir was keenly felt.

The construction of the reservoir, viz., the Krishnaraja Sagara Dam, perhaps the second largest artificial lake in the world, was soon undertaken and completed, and it owes



its accomplishment to the energy and enterprise of another great Dewan of Mysore, Sir M. Visvesvaraya. These developments enabled the State to increase the power supply to 46,000 h.p., and yet the demand for power is growing, with the result that the Government of H.H. the Maharaja have under contemplation the development of power from other water sources similarly situated.

In regard to hydro-electric development, Mysore not only helps herself, but is a source of strength to the neighbouring Provinces. She has set such a wonderful example of initiative and enterprise that others have not been slow to appreciate or follow. This scheme has been the parent of the many industrial concerns that have been established during recent years in the State. Till twenty years ago there were hardly twenty factories, and today there are over 400 installations of the most varied type, a large proportion of which depend on electric power.

#### THE DEPARTMENT OF INDUSTRIES AND COMMERCE

The industrial activity in the State owes its impetus in a large measure also to the aid and advice made available by the Department of Industries and Commerce—a branch of administration which was separately established in 1913 on the advice of Sir Alfred Chatterton.

One of the important functions of the Department has been to stimulate private enterprise in industries and commerce by the grant of loans and technical advice. The example set by the State has induced private capital to be invested in these concerns in an ever-increasing measure. The Department is assisting industrial development by other means also, as, for example, by training young men in workshops established by the Government, by grant of technical scholarships for training in India or abroad and by undertaking pioneer and demonstration work. There are some factories under the direct control of the State, prominent among them being the sandalwood oil factories, the soap factory, and the industrial workshops.

Even a passing reference to the industries in the State would not be complete without a reference to the sericultural industry. This occupation, which partakes of the character both of agriculture and an industry subsidiary to agriculture, has been practised for a long time in the State, although its fortunes have been of a changing character. The reason for this is to be found in the fact that the climate and soil in the State are admirably suited for mulberry cultivation and rearing of silkworms. The industry is practised over a third of the State, an extent of 52,000 acres being under mulberry cultivation, and the value of silk produced being estimated at a crore of rupees. It gives occupation to about 200,000 people. In view of the importance of this industry to the State, the State has been making special efforts to protect and develop the industry on scientific lines. There is now a separate department of sericulture whose chief functions are to carry on experiments in silkworm breeding with a view to improving the Mysore race of silkworms, fixation of new races, etc., improving the seed supply, and carrying out demonstrations in rearing and reeling. The future of the industry, in view of the competition of foreign silks and artificial silks, gives rise to some anxiety, but it is hoped that by employing better seed and improved methods, a better quality of silk will be produced which will enable it to withstand competition and take its own rightful place in the economic development of the State.

Equally important in the economic development of the State is the cotton industry. The total area under cotton is 115,000 acres. The total number of weavers is about 52,000, and a large percentage of this number weave only coarse cloths. The Department of Industries has taken up the improvement of this indigenous industry and demonstrated the use of the shuttle looms. These looms are gradually replacing the earlier crude looms. The Government weaving factory trains weavers in the use of improved appliances and machinery and experiments in new designs and patterns and the manufacture of machinery suited to the cotton



weavers. The introduction of power looms is another direction in which the Department has been assisting the growth of the industry. There are ten power-loom factories in the State now. The object of developing these small industries is to reduce the export of raw material and provide occupation for people in the State during non-agricultural seasons. Another industry which is showing signs of revival is the carpet industry. Bangalore carpets find a market both in America and Great Britain.

Of the other industries in the State, coffee and tea deserve to be mentioned. Coffee is a commercial crop of great importance in the State, the total acreage under coffee being 100,000. A large number of plantations are in the hands of Europeans, be it said to whose credit that they have done much pioneer work in this connection. Mysore coffee is noted for its superiority and flavour, and is one of the principal items of export from India to this country. The value of the coffee crop is estimated to range from a crore to a crore and half rupees. Tea is another industry which has recently established itself in the State with promises of a good future.

The State has besides various other resources for the development of many new industries, but as elsewhere in India, lack of capital, absence of organized effort and want of facilities for investigation and research have hampered the progress in the past, but it will be noted that determined efforts are being made to give the necessary impetus for a more rapid progress in this direction.

#### TRADE OF MYSORE

The external trade of Mysore passes through two channels—viz., the highways and the railways. The total length of the roads in the State is nearly 6,000 miles, and annually Rs. 10 lakhs are spent on the maintenance of these roads. The State owns 713 miles of railway, of which 440 miles are worked by the State and 273 miles by

the M. and S.M. Railway Company. The total gross earnings during 1927-28 amounted to Rs. 52.59 lakhs, and the net earnings amounted to Rs. 27.29 lakhs. The State fully realizes the importance of communications in the development of the resources and trade of the country, and has been steadily pursuing the policy of extending railway communications and road developments. A prominent feature of the constructive programme of the railway development is the extension of the existing lines to the frontiers of the State with a view to establishing trade connections between Mysore Railways and British Indian Highways of Commerce.

The establishment of the Mysore Chamber of Commerce in recent years is another step in the direction of developing trade beyond the State. The Chamber has been doing a good deal of useful work already and is bound to be of great help to foreign business people anxious to establish trade connections in Mysore. The Chamber of Commerce has the support and sympathy of the State, and has the privilege of sending a member to the Legislative Council and other public bodies in the State.

Although many details have been given, the subject of the natural resources of Mysore State is by no means exhausted. There are aspects of it which I have scarcely mentioned, especially the impetus that will be given to production and to manufacturing development by the great schemes of irrigation already undertaken or in contemplation. This subject alone would require a separate article. It is the desire of the Mysore Government to establish and develop friendly trade relations with the advanced countries of the West for their mutual benefit.

## CHAPTER III

### ECONOMIC DEVELOPMENT OF KASHMIR STATE

(Under the authorization of the Government of H.H. the Maharaja)

TRANSPORT AND COMMUNICATIONS.—The material progress of the State during the last twenty years has been unique. Separated from the Punjab by rocky barriers and mountain ranges, the territories of His Highness are ensconced in a way which cuts them off from the economic developments in the plains for a considerable time. Owing to the mountainous character of the country, the average height of which is over 5,600 feet above the sea level, and as a result of long distances, communications were difficult and scanty within the State. This life of forced seclusion was not conducive to economic progress. The development of modern lines of communications started the State on a career of prosperity. The Jhelum Valley Road opened the country to the world and made large-scale export and import trade possible. Another mountain road connecting Jammu and Srinagar has now been built, opening up a part of the country which was so far without easy direct contact with the world. The total mileage of metalled roads in the State is 4,608, of semi-pucca roads 45, and kucha roads 1,535. The road from Jammu to Srinagar, covering a distance of 200 miles, rises from Jammu to the Patni Pass at an altitude of about 7,000 feet, and then after dropping down to the valley of the Chenab at Ramban rises again to the Banihal Pass at an altitude of 9,000 feet, whence it drops again to the Valley of Kashmir. There is also the pucca bridle road of about 200 miles from Srinagar to Gilgit and another of almost the same length to Leh. The State spends annually a sum of about Rs. 30 lakhs on an average on the Roads and Buildings Branch of the Public Works Department. The greater part of this expenditure is of an obligatory character, being devoted to the

maintenance of existing works, and particularly of the two mountain roads, which are necessarily expensive to keep up.

The progressive policy in the matter of roads and transport has opened up the country and brought it into contact with the Indian and the overseas market. It has rendered the development of the economic resources of the State possible, as the remarkable increase in trade evidences. The prosperity of the cultivator as well as the development of industries and handicrafts depend upon the maintenance of cheap transport and communication, and the enormous capital outlay and annual expenditure involved in the road policy of the Government have been amply justified by the general economic progress of the State during the last twenty years.

The welfare and prosperity of the agricultural population of the State has always been the first care of His Highness' Government. With a view to improve their lot and make them a prosperous and contented peasantry, a consistent policy of giving tenants security of tenure and bringing home to them the methods of modern production has been followed by the State. The land was regularly surveyed and settled. Strict orders were issued prohibiting forced labour and the custom which was prevalent of impressing villagers to carry the luggage of touring officials and visitors. A department of agriculture was established, and a policy of instructing cultivators in improved methods and of supplying them with better seed, etc., was initiated. The department has also taken in hand work with regard to the consolidation of holdings. The fragmentation of plots stands greatly in the way of improving Indian agriculture, and, realizing this, His Highness' Government has sanctioned special rules for the consolidation of scattered plots. Much progress has been made in this work both in the Jammu and Kashmir Provinces.

AGRICULTURE.—On account of the hilly and mountainous nature of the country, the cultivable area of the State is only 6·8 per cent. of the total area; and, according to the

census of 1921, the net cultivated area was 4·3 per cent. of the total area and 74·5 per cent. of the cultivable area. According to the same report, 31·5 per cent. of the gross cultivated area is irrigated, the means of irrigation being provided by the three great rivers which traverse the State territories—namely, the Chenab, the Jhelum, and the Ravi, together with their tributaries.

The classes of soil generally recognized in Kashmir are clayey rich loam, light loam with sandy subsoil, low-lying swamps and rich peaty soils. The soil in the Kashmir Valley is of alluvial origin and very fertile.

At the census of 1921 the total population of the State numbered 3,330,518, and 82 per cent. of these people are agriculturists or dependent on agriculture. The country is, therefore, predominantly agricultural.

On a hill-shaded map the Kashmir Valley is shaped like “a white footprint set in the mass of black mountains.” It extends north-west and south-east, and is about 84 miles long and 20 to 25 miles wide, with the river Jhelum running through it in a north-westerly direction. The basin of the valley has an altitude of about 5,600 feet above sea level. To the south-west and north-east are situated the extensive sedimentary deposits (Karewa) of probably Pliocene age, which rise in abrupt little cliffs above the low levels of the valley and then more gently ascend to the foot of the valley. The soils on the Karewa deposits are of great fertility and only require good and timely rainfalls (which, of course, are uncertain) or artificial irrigation facilities in order to demonstrate their richness.

**PRINCIPAL CROPS.**—The crops of chief importance in Kashmir are given in the following table, taken from the Valley of Kashmir, by Sir Walter Lawrence, at one time Settlement Commissioner in the State :

AUTUMNAL CROPS

Rice.	Saffron crocus.	Italian millet.	Buckwheat.
Maize.	Tobacco.	Millet.	Pulses.
Cotton.	Hops.	Amaranth.	Sesame.



## SPRING CROPS

Wheat.	Tibet barley.	Rape.	Peas.
Barley.	Opium poppy.	Flax.	Beans.

RICE.—Rice is the staple food of the inhabitants in the Kashmir Valley, and wherever adequate irrigation is obtainable this crop invariably is grown. Coarse varieties of rice are grown even as high as 7,000 feet above sea level. Consequently rice is the most important and most extensive crop in Kashmir. During the year 1921-22 (for which figures are available), out of a total area of 436,000 acres of irrigated land, as much as 240,000 acres were under rice.

The cultivators do not spare themselves in any way in growing this crop, and although their implements are primitive and might be considerably improved, yet the cultivation is extensive and every effort is made to take from the soil as much as it will yield.

The rice-growers have by centuries of experience come to know the peculiarities of their fields, how they should be handled, and what types of rice would suit them best under the prevailing conditions—whether the soil is rich or in an impoverished condition, whether it is light or heavy or swampy, whether the irrigation water is very cold, coming straight from the snow-fed streams, or comparatively warm, after passing through other fields and watercourses, etc. Scores of local types, therefore, are found under cultivation and carefully selected and grown. The result is that the yield per acre is better than in most other parts in India, a yield of 40 maunds (3,280 lbs.) per acre on good land being by no means uncommon.

Both broadcasting and transplantation methods are practised in rice cultivation, each being dependent upon several factors—the size of holding, and labour available, and the availability of sufficient water at the right times. Broadcasted rice must be sown early, requires more watering, more weeding and more labour. The cultivator prefers to grow his seed grain for the next year on broadcasted



fields. The chief trouble in weeding arises from (1) self-sown rice of the previous harvest and (2) from wild rice. The first difficulty is overcome by alternately growing rice of green and other coloured straws, so that any self-sown rice plant, from the preceding harvest, can be easily detected and pulled up. The second difficulty—namely, the detection of wild rice—is a more difficult task and has to be learnt early from practice.

Most of the rice land produces only one crop in the year and remains fallow during winter. In some cases oilseeds (*Brassica sp.*) are grown as a winter crop, and the bright golden fields in flower provide very pleasing patches of colour at the approach of spring.

MAIZE.—The non-irrigated cereal crops in their order of importance, as judged by the acreage under each crop, consist of maize, barley, and wheat. Maize constitutes the staple food of the shepherds and cowherds who dwell in the higher valleys with their flocks and herds. Maize is grown in the main valley as well, but the Kashmiri cultivator who devotes most of his patient labour to rice, attends but indifferently to his maize, barley and wheat fields. Whereas the rice fields are very carefully terraced, following the contours of the land, no such attention is bestowed upon the unirrigable land.

There are natural obstacles in the way of as good maize, barley, and wheat crops being grown in Kashmir as are found in the plains of British India. Kashmir has some quite good indigenous varieties of beans, and many exotic varieties (mostly English) have also fairly established themselves there. Maize and bean types, as now grown in Kashmir, are included among the agricultural exhibits.

SAFFRON.—The saffron cultivation of Kashmir deserves to be specially noted. The “saffron” of commerce is the tripartite red stigma of *Crocus sativus*. In India saffron is cultivated only in the Kashmir State territories; and here, too, in only two localities—namely, (1) on some alluvial lands (Karewa) within a distance of fifteen miles from

Srinagar, near about Pampur, and (2) in Kishtwar—on a fairly limited scale.

The methods of saffron cultivation practised in the Kashmir Valley and in Kishtwar differ from each other. In Kishtwar, where the rainfall is comparatively small and the corn is liable to be eaten up by porcupine, saffron is grown in flat fields, planted in rows therein, at a fair depth of about eighteen inches from the surface. In the Kashmir Valley the saffron fields are divided up into about five-feet-square beds, each square bed being surrounded by a six-inch-deep draining channel, and the saffron corms planted on these beds are at a depth of only about four inches from the surface. Thus the land is prevented from becoming water-logged, in contradistinction to the necessity for conserving moisture in the Kishtwar soil.

Saffron fields remain under that crop for about ten years, during which period the number of corms originally sown is almost doubled. It may be mentioned that a saffron corm flowers only once; but before it rots away another fresh corm is formed at its base for the next year. After the field has borne saffron for about ten years, the land remains fallow, or is put under other crops, such as wheat or barley, for a period of about eight years. No manure is at any time applied to these fields. They receive three hoeings and weedings—in May, July, and September—and the last one practically is only a weeding.

Saffron land is not assessed to ordinary cash revenue. Instead, the share taken by the State, consisting of half the produce, is auctioned out to a contractor, who himself arranges to collect that share at harvest time. Flowers are picked under the contractor's supervision in baskets by the cultivators, and they are divided half and half. The contractor and the cultivators then extract their own saffron from their separate lots. Generally three pickings take place at intervals of about one week.

Saffron is extracted in two ways. Firstly, by cutting out the red stigmas from individual flowers and drying them;

this product is known as "Mogra" and is the best in quality. By the second method the whole flower is dried, then lightly beaten with sticks and thrown into pails of water, when the essential parts of the flower sink to the bottom and the petals, etc., remain floating, and are removed, the operation being repeated three times, though the latter extractions are poorer in proportion.

**HORTICULTURE.**—Horticulture has always been popular in the Valley, and His Highness' Government have organized a department for the purpose of helping the cultivators by giving them improved machinery and generally placing at their disposal the scientific experience and modern methods of fruit cultivation in the West. Kashmir grows most European fruits, and with proper arrangements for transport and marketing can supply a great proportion of the fruit demand in India. The fruit grown is threatened with extinction due to the prevalence of pests and diseased trees. There is an establishment for spraying work, and latterly His Highness' Government have sanctioned, as an experimental measure, the spraying of trees of private owners free of charge. Legislation with a view to acquiring power to cut diseased trees is also under contemplation. A scholar has already been deputed to America to learn the latest methods in entomological work, and it is hoped that on his return the fruit industry will receive a great impetus and become a considerable source of income to the agricultural population.

**CO-OPERATIVE CREDIT SOCIETIES.** — The agricultural population of the State is, as everywhere, poor and improvident. Owing to the lack of credit facilities necessary for all productive operations, they are placed at the mercy of usurers, who thus fatten on the labour of the agricultural worker. In order to meet this problem of agricultural indebtedness, which showed a tendency to increase, His Highness' Government established a Department of Co-operative Societies. The movement has spread with rapidity, resulting in a considerable amelioration of the

condition of the rural population. In 1921 there were only 955 societies in the State. The number of societies now working is 2,201; of these 2,018 or more than 90 per cent. consist of agricultural credit societies. The movement has also spread over a considerable area. The working capital has increased during the last five years from Rs. 29,66,580 to Rs. 61,39,577. Out of this sum Government loan amounts only to Rs. 5,55,000; the rest is made up of share capital reserve fund and profits of societies and deposits from the public. The share capital increased from Rs. 6,35,279 to Rs. 14,81,585, an increase of 13 per cent. in five years.

There are 12 central banks, which have also made considerable progress during the last five years :

	1922-23.	1927-28.	Increase.
Shareholders ...	1,698	2,793	64 per cent.
Paid-up share capital	1,16,221	3,07,496	165 "
Reserve fund ...	59,100	1,12,045	96 "
Annual profit ...	29,929	53,700	78 "
Loans and deposits	7,33,663	15,20,958	107 "
Working capital ...	11,67,117	24,95,499	113 "

The management of these institutions has been rendered much more efficient, and accounts are now kept on improved and up-to-date lines. Every care is also taken to see that the investments are in every way sound and secure.

**RURAL SANITATION AND EDUCATION.**—The impetus of the co-operative movement has also been used to interest the rural population in the needs of village sanitation and education. A model village in which the inhabitants by their co-operative activity look after every matter concerning their own welfare was established at Rukh Mujgand, in Kashmir, about eight miles from Srinagar. There is in this village a co-operative society to provide credit facilities to the members and to save them from the clutches of usurers, a consolidation society to consolidate scattered holdings, a compulsory education society which provides primary education to the children of the members, and a sanitation society which looks after the sanitary arrangements. His

Highness the Maharaja paid a visit to the village in 1927, and highly appreciated the good work which the fourfold combination of co-operative activities had brought about, and in token of his appreciation he exempted the zamindars from one-fourth of the total revenue of the *Kharif*. His Highness was further pleased to issue an order directing remission of Government revenue in similar manner, in cases of such sanitary arrangements in other villages.

Co-operative activity has also been directed towards village education. There are now fifteen societies for compulsory education (one of which is for the education of adults) with 541 members. All these societies are self-supporting and are run independently by members. Another aspect of this movement which augurs well for the future is its interest in social welfare. A considerable number of societies have adopted bye-laws binding their members to do away with expensive and demoralizing habits, such as drinking, gambling, etc.

AGRICULTURAL INDEBTEDNESS.—His Highness' Government has also taken stringent measures to prevent usurers from preying upon the cultivators. When the cultivator has to pay public rates of interest and sell the crop before harvesting, it is impossible that he could ever be out of debt. The ordinary law enforcing the letter of contract was found to be inadequate, and the principle now recognized in all civilized countries, that the borrowers should be protected from their temporary difficulties being taken advantage of, was enacted in a special law. This measure, known as the Agriculturists' Relief Regulation, is designed to check and control usurious moneylenders in their dealings with agriculturists, without in any way interfering with the provision of ordinary credit and banking facilities and the legitimate carrying on of their profession. Under the Regulation an agriculturist debtor can bring his creditor to court for the settlement of an account. The courts are empowered to go into the accounts of the last five years, to disallow rates of interest in excess of the prescribed

maximum, to see that the total interest does not exceed 50 per cent. of the principal, and to fix instalments on the basis of reasonable paying capacity of the debtor.

**LIVESTOCK.**—The farmer's livestock consists of cattle (plough bullocks, cows, and buffaloes); sheep and goats—mostly sheep; domestic fowls—ordinary poultry, ducks and geese; and ponies.

According to the Census Report of 1921, the latest enumeration of livestock of all kinds showed an average of 136 animals for every person against 65 in British India. The State then possessed 1,683,384 cows and oxen and 419,771 buffaloes, numbering 2,103,155 bovines altogether, giving an average of over 64 per 100 persons; 2,253,534 sheep and goats, giving an average of 2 to every 3 persons.

The cattle of the State are very much undersized. The bullocks are slow workers and not strong enough for good agricultural work. Realizing the importance of this question to the agricultural population, His Highness' Government has taken efficient measures to improve the stock. Bulls from British India have been imported and are employed by the Veterinary Department in both the Provinces. Efficient arrangements have been made for the treatment of cattle diseases, and it has been decided to place the Veterinary Department under the charge of an experienced official from British India. There are at present 14 Veterinary Dispensaries in both the Provinces of the State, of which 7 are in the Kashmir Province (4 at District Headquarters and 3 at Road Posts) and 5 in Jammu Province (one at each District Headquarters) and 2 in the Frontier Districts of Ladakh and Gilgit. There is one Veterinary Assistant at each of these Dispensaries under the control of Provincial Veterinary Inspectors.

The prevailing diseases that the veterinary staff has generally to combat are rinderpest and foot-and-mouth disease. Advanced and modern methods of treatment by way of inoculations, etc., have been introduced, and considerable sums are every year expended by the Govern-



ment on purchases of serum from the Imperial Bacteriological Laboratory, Muktesar, Nanital, U.P., and medicines from different firms.

The castration of plough oxen is done with the newly introduced Burdizo Pencer Clamps with very satisfactory results.

The following comparative statement will show the number of sick animals treated by the Veterinary Department during the last five years :

Year.			Jammu Province.	Kashmir Province.
1923	...	...	52,258	13,758
1924	...	...	52,262	15,641
1925	...	...	77,354	13,948
1926	...	...	63,505	13,593
1927*	...	...	40,845	7,926

The Government sent in 1925 three students for veterinary training in the Punjab Veterinary College, Lahore, for a course of four years. This year one hereditary State subject in compliance with His Highness' commands has been sent abroad for higher veterinary training.

ARTS AND CRAFTS.—The arts and crafts of Kashmir have been famous all over the world from time immemorial. They consist mainly of shawl manufacture and embroidery work, carpet weaving, papier-mâché, wood carving, basket weaving, and metal work. The art of shawl weaving which produced the exquisite beauty of the old Cashmeres has been much debased by the introduction of cheap aniline dyes and crude designs. But now, under the patronage and encouragement of His Highness' Government, the craft is reviving, and the Kashmiri shawl industry, which used to provide livelihood to a large part of the population, may look forward to another period of prosperity. Embroidery, as a cottage industry, is still very popular, and is an auxiliary to shawl manufacture. Carpet industry in Kashmir dates as far back as A.D. 1423, but its history has also been a chequered one. During the

\* The figures available for six months up to Assuj 1984.

reign of Maharaja Ranbir Singh an attempt was made to put the industry on a firm basis, and since that time the craft has made much progress, mainly through the encouragement given by the State. There are at the present time many carpet-manufacturing concerns in Kashmir, and their products have already taken an honourable place among the hand-woven carpets of the world. The papier-mâché industry is in a flourishing condition, even though in this essentially Kashmiri art the demand for cheap goods has affected the quality of the work.

Of all the cottage industries the one which is in the most flourishing state is that of wood carving. The work turned out is not only beautiful but of great utility, and as such finds a ready and expanding market all over the world. The bold perforated carving on wood well illustrates the peculiar care and patience of the Kashmiri craftsman in modelling all the intricate and delicate details of stalk, leaf, and flowers out of rough wood. The State Technical Schools devote much attention to this craft, and it may be said that, under the patronage of His Highness' Government, wood-carving work, suited to modern needs, such as screens, drawing-room sets, smoking cabinets, etc., has now attained technical perfection. Another entirely Kashmiri form of wood-work is the *Khatambundi* used for ceilings. This is done in panels of pinewood in various geometrical designs fitted together in grooves.

PAPER INDUSTRY.—Paper manufactured by hand was an important cottage industry in Kashmir in ancient days when this paper was in common use. With the march of time this industry had for want of technical skill fallen into decadence, as mill-paper came more into use on account of its finish, although the hand-made paper was more durable. Attempts were made to remove the defects in sizing, polishing, and in the manufacturing processes, and technical advice was given to the artisans, which resulted in the production of a better quality of paper. The Government also extended their patronage to them, and purchased a

larger quantity of paper than was done before for use in Government offices.

Another important cottage industry introduced through the help of the State is wicker-work. English willow was introduced into Kashmir and took root, yielding longer twigs. The Technical Institute at Srinagar trained pupils in this work, and mainly through its efforts the industry is now establishing itself firmly.

The policy of His Highness' Government in the matter of arts and crafts has been to revivify old cottage industries and handicrafts which have tended to die out through lack of encouragement, and to establish new and suitable ones. The prosperity of a population which is predominantly agriculturist depends on the subsidiary cottage industries which it can carry on along with its agricultural work. The policy of the Department of Industries has been to encourage cottage workers by supplying them with improved materials, finding suitable markets, and giving instruction in improved methods.

THE DEPARTMENT OF INDUSTRIES.—In order to give the economic possibilities of the country specialized attention, and with a view to conduct investigation on scientific lines and to exploit the industrial resources of the State, a special Department of Industries was created in 1923. Apart from the encouragement of cottage industries noticed above, the department has been actively engaged in exploring new avenues of economic development, and in starting numerous large-scale industries for which conveniences exist in the State.

The department directed its energies first towards the collection of material for the preparation of correct and accurate statistics of the State. An Industrial Laboratory was also established in 1923 at Srinagar, equipped with up-to-date appliances and apparatus. It conducted investigation in regard to various forest products with a view to ascertaining their commercial possibilities.

SANTONIN.—Experiments were made to extract santonin

from *Artemisia maritima*, which is abundantly found in the State forests, and it was established after analysis of the plant that the collection made some time between July and August contained a fair percentage (between 4-9) of santonin. These laboratory results were confirmed in semi-commercial experiments which were conducted at Abbottabad by a European firm, and a Government officer was deputed there to watch and supervise the process. The results obtained were placed at the disposal of capitalists who interested themselves in this drug, and offers were received for its purchase as well as for the manufacture of santonin. His Highness' Government has recently sanctioned certain concessions in favour of an Indian firm desiring to start a factory for the manufacture of santonin within the State.

As santonin is a very costly drug and a market has been created in Europe for our *Artemisia*, it is likely to become an important source of forest revenue. The revenue from the sales of this plant has increased from almost a negligible sum to the figure of Rs. 2½ lakhs per annum.

**ESSENTIAL OILS.**—Experiments for extraction of essential oils from rose flowers, thyme, and *Skimmia laureola*, found in forests and hillsides, and saffron flowers were made in the Government Industrial Laboratory and at other places where the plant grows. These experiments were successfully completed, and proved beyond doubt that an industry for extraction of essential oils, if started, would be a success.

Rose distillation has been started and is being carried on since last year. Applications were invited for the distillation of thyme by private enterprise.

*Skimmia laureola* yields an essential oil which contains what is called linalyl acetate, which is largely used in artificial perfumery in Europe. This product cannot find a sale in Indian markets, where the demand for and use of this essential oil are limited, and attempts are therefore being made to introduce it in European markets, especially

Paris, where it will find a ready sale. Negotiations in this respect have been started, and it is hoped that in a short time they will mature.

Peppermint grows wild in the State, and analyses of the plant were made in the laboratory, but it did not yield much menthol, which is the oil it yields. Peppermint seed has been imported for growing the plant, and the experiments made with the imported variety have given satisfactory results, and the yield of menthol has been higher. The seed has been grown, and when a sufficient quantity of the acclimatized seed is available, semi-commercial experiments will be made to gauge its economic possibility.

Eucalyptus, which yields a medicinal oil, has also been grown in the forests and has thriven well.

LAC.—The existence of natural lac on bear trees in the forests was noticed, and a proposal was made for the deputation of a Forest Officer to Central Provinces for acquiring training in lac culture, and he has returned since, and cultivation of lac on scientific lines has been commenced in one of the forest divisions whose sales are expected to contribute considerably to the growth of forest revenues, as lac is an important commercial product.

Many other plants yielding medicinal drugs, such as fox-glove or digitalis, hyoscyamus, belladonna, and podophyllum, were planted in the forest nursery at Tangmarg, and these plants have thriven there. The growth of some other plants like cinnamon tamala, which yields cinnamon bark and leaf, laurels, from which camphor is extracted, and *Viburnum prunifolium*, was noticed in the State forests, and the Forest Department was asked to extend the growth of these plants with a view to their exploitation.

KUTH.—Kuth, which is also known as "Saussurea Lappa," grows extensively in the Kashmir State forests. It is a valuable economic drug and is chiefly consumed in China. For a long time past the Government realized only a small amount for this valuable product by sale through

its agents. Later on the kuth market was studied, and investigations were made with regard to its use, and the important information which the Department of Industries obtained enabled the Government to dispose of the kuth in a judicious way, with the result that the price is now as high as Rs. 216 per maund. The revenue from this source has increased from about Rs. 2½ lakhs to about Rs. 14 lakhs.

RESIN.—Resin, from which turpentine is manufactured, is extracted by tapping chil trees, and the quantity of resin thus extracted in the State was on the average about 8,000 maunds per annum. The defects in tapping, which shortened the life of the tree, were removed, and the collection has steadily expanded and is now a factor of great importance to the people in many parts of the State. By 1926 the production of crude resin had risen to 27,000 maunds, and the collections of the year 1928 are expected to attain the figure of 35,000 maunds, which is the minimum unit for running an industry for manufacture of turpentine. Negotiations for establishing the industry are being made with a pioneer industrialist who is connected with turpentine manufacture. The revenue from this source has increased from about Rs. 40,000 to Rs. 2 lakhs.

The forests in the Kashmir Valley provide wood of the required quality for the manufacture of matches, and with the help of the Department of Industries a factory has already been started at Srinagar.

TANNERY.—Large quantities of hides and skins are available in the State, and they are being exported to British territory. The statistical information collected, and the investigations made in regard to this, proved that there was vast scope for a tannery being established in the State, the raw materials being available in abundance at comparatively cheap rates.

A tannery was started in the year 1924 in Jammu, financed by the Private Domains of His Highness. Leather for boots and shoes is tanned, and leather trunks of a very durable quality are also manufactured at the tannery.



Another application has been received for starting a tannery in Srinagar, and the application is under consideration.

PAPER AND PULP MANUFACTURE.—Permission has been granted to a company for establishing a large pulp and paper mill. They have not yet commenced work.

WEAVING DEMONSTRATION.—The cultivators of Kashmir, who form the majority of the population, are traditionally weavers. They weave home-spun cotton and wool for their domestic use, but their methods are primitive, and the looms are also of an ancient type. Their products are therefore very crude. Some time ago the Department of Industries suggested the demonstration of improved looms and methods. A Demonstration Peripatetic Party was accordingly sanctioned by the Government in the year 1924, according to the scheme framed by the department. The party has been touring from village to village, and at weaving centres it is demonstrating the use of the new looms. The party has done much useful work, and the weavers are rapidly taking to the new implements and looms. The party, having toured in Kashmir for two years, is now engaged in the Jammu Province.

The Department of Industries has been instrumental in creating an industrial atmosphere in the country as a result of which a network of industries has come into being: (1) soap manufacture; (2) carpet factory; (3) ice factory; (4) tent factory; (5) oil factory; (6) two factories of wood-work, one in Baramulla and the other in Srinagar; (7) dairy farm; (8) knitting; (9) trunk manufacture; (10) metal works; (11) nickel-plating; (12) two sawmills; (13) five willow works—the students of the Technical Institute, Srinagar, who completed their training have started willow works in Srinagar; (14) sports materials.

SILK INDUSTRY.—The largest and most important industry under the control of the State is sericulture. The silk industry of Kashmir is of ancient standing, though its early history is obscure. In A.D. 1536 mention is made of

the abundance of mulberry trees in Kashmir, and of the fact that the people would not allow these trees to be used except for the feeding of silkworms. No attempt seems to have been made to put the industry on a large-scale basis until 1869, when His Highness' Government took up the question. The attempt, however, proved abortive, and as a result of disease the whole crop of silkworms was completely destroyed in 1878. It was only in 1889 that the Government again decided to experiment with the production of eggs on the Pasteur system. In 1896 it was finally resolved to re-establish the industry on a commercial basis and in a more expansive and scientific manner. The industry was firmly established under competent experts, and in 1904 there were ten filatures containing 1,864 reeling basins, which gave employment to 4,000 labourers daily. The factory was unfortunately burnt down in 1913 and could be re-established on a proper basis only after the war.

The Srinagar silk factory is the biggest of its kind in the world. To keep its pre-eminent position it is essential that the industry should be conducted on the most up-to-date lines. For this reason, His Highness' Government has been from time to time sending its officers to various parts of the world to study the latest mechanical and other improvements for the production of the best quality of silk on the most economical lines with a view to their introduction in the State factories. Every care is taken to make it a model industry; its scientific apparatus is always kept up-to-date, and no effort is spared to study the conditions of production and marketing in other silk-producing countries.

The three salient features with regard to sericulture in Kashmir are the abundance of mulberry trees, the suitable elevation, and the favourable climate.

The soil of Kashmir is favourable to the growth of the mulberry tree. The tree is the property of the Kashmir Government and may not be cut down without permission. Every effort is being made to increase the number of trees, since the quantity of silkworm eggs distributed to the

rearers has almost reached the limit that the existing trees admit of. Since 1914 thousands of trees have been distributed yearly from the mulberry nurseries for plantation on ravines, slopes, and other waste lands of the State, according to the size of the adjacent villages and number of the cocoon rearers. The trees are allotted by the village headman to each cocoon rearer, according to the amount of eggs he receives.

Silkworm rearing was started on scientific lines in 1898. During that year 415 ounces of eggs were distributed amongst 400 rearers and produced 469 maunds of cocoons. This quantity was gradually increased, till in 1904 26,000 ounces of eggs were distributed amongst 11,000 rearers and yielded 16,000 maunds of cocoons, the average for these seven years working out at 16,000 ounces of eggs distributed amongst 4,900 rearers, and 9,500 maunds of cocoons produced. From 1905 to 1913 the corresponding averages were 30,200 ounces of eggs, 22,000 rearers, and 28,000 maunds of cocoons. From 1914 up to this year the averages are: eggs 38,200 ounces, rearers 44,800, and cocoons 33,300 maunds.

The eggs are issued by the department shortly before they are ready to hatch. The quantity issued is about 42,000 ounces. The eggs are given to the peasants free, according to the size of their houses and the number of their family. The number of silkworm rearers enlisted and registered up to date on the departmental books is about 60,000, but probably about 180,000 to 200,000 men, women, and children are directly engaged in this work. It is worthy of note that whereas formerly persuasion and pressure were needed to get the peasants to rear the silkworms, the difficulty now is to limit them to the real amount of eggs which they are capable of rearing.

With regard to increasing the cocoon crop, the introduction of modern methods and various other improvements have been undertaken by the Government.

As the cocoons arrive at the factory they are inspected,

weighed, and then taken to the sechoirs ; there they are dried and stored away. About 500 men, women, and children are employed daily on the work of sorting the cocoons.

The reeling of cocoons on scientific lines was also started in 1898, when two filatures containing each 212 reeling basins were constructed. This number was gradually increased till in 1903 there were ten filatures containing a total number of 1,864 basins. During this period the average output was about 40,000 pounds of silk, and 17,000 pounds of inferior and waste silk. During the period 1905 to 1913 the average output was 145,000 pounds of No. 1 silk, and 88,000 pounds of inferior and waste silk. In this year, as already mentioned, the disastrous fire occurred. After the fire, five filatures containing 304 reeling and 152 cooking basins each were constructed on the most modern lines possible. The basins in these filatures are heated by electricity and the cooking basins by steam. The reels are split, turned by electricity, and encased in boxes. At present the boys can reel five or six skeins at a time. After the silk has been reeled, it is collected and brought in for examination ; certain skeins are picked out for testing, the remainder are twisted into hanks and packed in bales. About 3,500 people are daily employed in these filatures.

The average output for the last six years has been about 1,75,000 pounds of No. 1 silk, and about 1,00,000 pounds of inferior and waste silk.

An experiment has recently been made with a set of four reeling basins of the most modern type ordered from Italy. This experiment has proved successful, and as a result of it, the entire replacement of the existing machinery is being carried out. The silk reeled on these basins is reported to be equal in quality to the best Italian and French.

Other large-scale industries which have been started with the assistance of the Government are aluminium and brassware works in Jammu.

**MINERAL RESOURCES.**—Kashmir has always been known to possess extensive mineral wealth, but it is only during the last ten years that a systematic geological survey of the State has been attempted. In 1917 a Mineralogical Department was established in order to organize a scientific survey of the mineral resources of the State with a view to ascertain whether the State possesses mineral wealth capable of profitable development. Up to date the department has produced 70 reports of over 1,000 pages on mineral occurrences, fully illustrated by about 170 plates of maps, sections, and photographs, and accompanied by full mineral determinations and quantitative chemical analyses where needed. The maps produced are by themselves a unique feature. In most cases they are drawn on the four times enlarged Survey of India topographical sheets; but very many, where the mineral is of sufficient importance or intricacy, are specially constructed plane-table surveys on a scale of 1 inch to 100, 200, or 300 feet, and with sketched contours of 25 or 50 feet. The work for recording the data in these reports and detailed plans and sections embraces ordinary field and laboratory examination, but supplemented in nearly all cases by excavations, pits, and drives, liberally indulged in, and by borings made with portable hand-drilling machinery down to 300 feet depth. In most cases this is sufficient to prove a deposit without recourse to the modern electrical, magnetic, or gravitational methods, which are unsuitable in mountainous folded regions.

All representative and type collections of rocks and minerals are made and registered, also those of thin sections for the microscope and photographs. In special cases large bulk samples are made, and sent abroad for special tests and research work.

Much descriptive work has been done by this department, and it is now established that many of the most useful minerals occur in large quantity in many parts of the State. In the Province of Jammu coal of excellent

quality has recently been discovered, and its exploitation only awaits that of other complementary mineral industries.

The existence of petroleum has long been suspected, and it is known that iron is found in the neighbourhood of Chakar, Pauni, and Reasi. A few years ago the Mineral Survey of the State discovered a very pure form of bauxite at a large number of places in the Jammu Province. As coal occurs in close connection with bauxite and stratigraphically at a horizon only 60 feet above it, it could be used for calcining the bauxite.

Copper ore also exists in the same area. In fact, around Reasi there is a conjunction of a number of useful minerals—namely, coal, iron, bauxite, copper, and high-grade talc (steatite).

Enormous quantities of graphite, gypsum, and ochre occur grouped together along a line of country 15 miles long to the north of the Jhelum Valley Cart Road, near Braripura in Uri Tehsil. The graphite is of the amorphous variety, distributed through a 400 feet thickness of phyllites, and contains only 25 to 30 per cent. carbon. About six million tons to the half-mile of outcrop are obtainable above ground water level. Hopes are entertained that by froth-flotation methods a 50 to 60 per cent. concentration may be effected, and that these large resources may some day be made industrially useful.

The gypsum is a pure, alabaster-like product of the alteration of a pyritiferous limestone of uncertain age. Hundreds of million tons forming mountain sides lie exposed to easy quarrying. It is being worked on a mining lease in a small way for building purposes, but it should have a much greater future for numerous industrial purposes, including use as "land plaster" as a plant food for crops, as strongly advocated recently in America.

The ochres, especially those of Rata Sar, are fairly rich in colouring matter and need but little preparation to make good oil paints. A large assortment of pleasant tints can be obtained by graphite admixture.



Near Khunamuh in Vihi district, Kashmir, occurs the geologically well-known Gangamopteris rock. When powdered to various degrees of fineness it makes a mild abrasive and effective polishing and scouring material for metals, marble, serpentine, cement floors, etc. The rock is of the nature of a compact pumice, and also has pozzuolanic qualities. Marble of fair quality is known in several places in Kashmir. A layer of white to grey colour near Braripura is being worked on a prospecting licence by a Srinagar firm for ornamental building purposes. Other excellent varieties and serpentines are found scattered over the higher hilly areas. Phyllitic slate, splitting into fairly thin glossy-surfaced laminæ, and belonging to the Silurian system or older, is known near Banihal and a few other places. It has already been extensively used with success for roofing many of the Banihal Cart Road bungalows.

The existence of precious gems in Jammu and Kashmir has long been known. Over fifty years ago sapphire was accidentally discovered at an altitude of over 14,000 feet. This area was exploited by General Anderson's Kashmir Mineral Company till it was supposed that the vein was exhausted. Recently a richer vein was discovered, and His Highness' Government is giving serious consideration to its immediate exploitation. Aquamarine has also been discovered in large quantities and is being worked.

List of minerals discovered or reported upon by the Mineralogical Survey :

FUELS	PRECIOUS AND SEMI-PRECIOUS STONES	
1. Coal. 2. Lignite. 3. Petroleum.	1. Sapphire. 2. Aquamarine. 3. Rubellite.	
METALLIFEROUS MINERALS	NON-METALLIC MINERALS	
1. Bauxite. 2. Iron ore. 3. Copper ore. 4. Lead (silver) ores. 5. Nickel ores. 6. Zinc ores.	1. Ochre. 2. Gypsum. 3. Graphite. 4. Kaolin. 5. Fuller's earth.	6. Bentonite. 7. Marble. 8. Slate. 9. Steatite. 10. Barytes.

FORESTS.—The forests of the State form another important source of revenue ; they in fact constitute a great portion of the wealth of this country. The total area of forests (excluding the Jagirs) is 9,668 square miles, of which only 160 square miles remain to be fully demarcated. The income from forests has steadily increased. The estimated income for A.D. 1927-28 is Rs. 72,50,000, as against Rs. 60,89,000 in the year 1924-25. It is very nearly one-third of the total annual revenue of the State.

The history of the Forest Department as an organized and scientific body commences from the year 1890, when Mr. McDonell joined the State as a lent officer from the Government of India. Previous to this, work in the forests was carried out in a most haphazard manner. The department consisted of a small staff of low-paid officials, while work was confined to the extraction of timber and limited only by the amount of advances given to contractors and officials and by the labour available. No limit was placed on the number of trees to be felled, and no control was exercised over the contractors, who were allowed to do much as they pleased. The forests were not demarcated ; there was no record of concessions, no definite forest law, and no working plan.

Despite the heavy fellings which were made during this period the State received very little from its forests.

The period 1890 to 1912 may be looked on as the time during which the foundations of a sound organization were laid down and consolidated. The forests were demarcated and divided into territorial charges ; working plans were prepared for the more valuable forests ; the establishment was increased and their salaries and prospects improved ; forest laws were enacted and concessions defined ; exploitation was carried out on more scientific principles, under contracts definitely laying down the number of trees to be felled and the period allowed for their removal.

The effect of introducing sound methods of working was reflected in the financial results, as will be seen from the

following table, which gives the average annual surplus during the various sub-periods :

Sub-Period.				Average Surplus.
1890-1892	...	...	...	3,06,848 rupees.
1893-1897	...	...	...	5,68,348 "
1898-1902	...	...	...	6,57,259 "
1903-1907	...	...	...	9,64,886 "
1908-1912	...	...	...	12,36,839 "

In 1924 the department was reorganized, the whole administration being placed under a Chief Conservator of Forests, with four Conservators in charge of circles. Of these four circles, two are territorial and two specialist, one for working plans and one for utilization.

Judged from purely financial considerations, the history of the department since A.D. 1890 has been one of unbroken progress. For the Samvat year 1983 (corresponding to A.D. 1926) the figures were the best on record, the gross revenue being Rs. 71 lakhs and the net surplus Rs. 42 lakhs. The following table gives the decennial increase in Revenue, Expenditure, and Surplus :

Year.	Revenue.	Expenditure.	Surplus.	Average Surplus.	
				Five Years.	Ten Years.
1890	6,27,732	1,20,207	5,07,525	—	—
1900	8,99,893	2,78,054	6,21,839	6,30,944	5,20,315
1910	16,43,299	5,14,113	11,29,186	11,79,742	9,76,230
1920	44,71,164	20,10,232	24,60,932	25,08,358	20,68,762
1926	71,24,002	28,95,227	42,28,775	34,27,850	29,68,104

The following figures for ten-year periods bring out this progress even more clearly :

				Rupees.
Average surplus for the period ending	1905	...		7,01,831
"	"	"	1915	14,04,454
"	"	"	1925	29,68,104

From these it will be seen that during each ten-year period the average surplus obtained from the department's working has more than doubled, a rate of progress which could be shown by few forest departments in the world.

Since the organization of the department under Mr.

McDonell, forest management has been carried out on sound silvicultural lines. By 1912 practically the whole of the valuable deodar forests had been brought under working plans. These first working plans were based on conservative principles, and the prescribed yield was calculated so as to spread over a long period the removal of the surplus stock of over-mature trees. By 1922 many of these plans had become marketable, and plans for many areas containing blue pine and fir were an urgent necessity. For this reason there was a great deal of leeway to make up, and possibly the greatest step forward in the 1923 reorganization was the creation of a special Working Plans Circle, for the charge of which a lent officer of the Imperial Forest Service was obtained from the United Provinces. Owing to the scarcity of officers in the Kashmir service suitable for this side of the work, two I.F.S. lent officers were also obtained from the Punjab for a period of three years.

During the last four years remarkable progress has been made in this side of the work. By the end of 1925 new plans on up-to-date lines had been prepared for all the important deodar forests of the State, and during 1926 work was commenced on the remaining forests of the Kashmir circle in which the main species are kail and fir. In addition to this, the most important chir forests of Jammu have been brought under a regular plan, and field work has been commenced in one of the two remaining areas of commercial chir. By the end of 1928 practically all the commercial forests in the State will have been re-examined and new plans or revised plans prepared for their management. This is a record of progress which could be shown by few provinces in India, and which the Working Plans Circle has every reason to be proud of. Not only has work in this circle been carried out on sound and efficient lines, but officers of the Kashmir service have now been trained to carry out the preparation of working plans.

The preparation and execution of working plans is perhaps the side of the department's work which is least

understood by outside people, yet it is the basis of all successful forest management. For only by working to carefully prepared plans can the productivity of the forests be maintained and a sustained revenue derived from the forest estate.

The last ten years have also shown considerable progress in the development of the commercial side of the department's activities. The turnout of timber, from which the department obtains its main revenue, has steadily increased with the introduction of new working plans, and while during Samvat 1972 (A.D. 1915) the total volume of timber removed, departmentally and by purchasers, was 6,314,275 cubic feet; in 1983 it amounted to 1,00,71,668 cubic feet.

But the greatest progress has been made in extending and developing the market for minor products such as kuth, resin, *Artemisia*, etc.

Since 1918 the department has taken over the supply of firewood to Srinagar City, and since that date there have been no more fuel famines such as were the feature of previous winters in Kashmir. The provision of cheap firewood from forests remote from Srinagar could, however, only be accomplished by selling the firewood at a price less than its cost of production, and the State has lost heavily by making these arrangements. To minimize this loss, suitable swamp areas, within easy access of Srinagar, have been handed over to the Forest Department, and have been successfully converted into willow plantations. The total area of these plantations is now nearly 6,000 acres, and the area is being extended annually. The creation of these willow plantations is a remarkably fine financial proposition, as within a period of sixteen years an almost worthless waste has been converted into a forest estate yielding a net revenue of approximately Rs. 15 per acre per annum. Few forest operations in the world can show such substantial returns in such a short period of time.

Kashmir is justly famous for its walnut wood, and the utilization of forest-grown walnut is now properly established.

At a factory at Baramulla the timber is artificially seasoned and converted into half-wrought rifle fittings, and Kashmir now supplies the whole of the peace-time requirements of the Army in India for rifle fittings, a total of 22,400 sets per annum.



## CHAPTER IV

### ECONOMIC DEVELOPMENT IN GWALIOR STATE

BY COLONEL KAILAS NARAIN HAKSAR, C.I.E.

[Colonel Haksar possesses, in addition to great administrative experience, a detailed knowledge of the industrial and commercial resources of the State of Gwalior. He was private secretary to the late Maharaja Scindia from 1903 to 1912, and intimately associated with him in the conception and execution of many of the development schemes briefly outlined below. Colonel Haksar also held the position of Senior Member of the Board of Revenue before attaining his present rank of Political Member of Council.]

It is impossible to say anything about Gwalior of the twentieth century without a respectful mention of His late Highness Maharaja Madho Rao Scindia, whose dynamic personality dominated every branch of activity throughout his vast possessions in Northern India, for three decades and more. This versatile Prince, who was at once a soldier, sportsman, administrator, builder and industrialist, worked unceasingly with almost superhuman energy to ensure the prosperity of his people and renown of his State. Absolute master of three and a quarter million people, mostly agriculturists of a primitive type, inhabiting an area of land about the size of Scotland, though not so compact, he was constantly engaged during his annual visits to Bombay and Calcutta in discussing schemes of development of his untapped mineral and forest resources, of improving communications and irrigation, with leading industrialists, commercial magnates, experts and engineers. Fired with a genuine enthusiasm to promote the well-being of his subjects, he left no stone unturned to convert his dream into a reality. With literacy as low as 4 per cent. and the figure for literacy in English—the lingua franca of all trade—as low as  $\frac{1}{2}$  per cent., and lower still in the moneyed classes, and Indian capital not being forthcoming, private enterprise in industrial matters has been hitherto insignificant. There are in the State at present two hundred

factories and industrial concerns worked by electrical energy or mechanical power, comprised mainly of cotton ginning and pressing factories, spinning and weaving mills, pottery works, tanneries, railway and motor workshops, oil and bone mills, cement, soap, essential oil and small chemical industries.

*Mineral Resources : Iron.*—The Gwalior State consists of two main blocks of territory, the northern being a compact geographical entity, while the southern—the Malwa plateau—comprises four separate tracts. The former has an extremely trying climate during the hot months and a healthy dry one during the four winter months, while Malwa, “Scindia’s fat province to the south, with its renowned black cotton soil and practical immunity from famine or pinching scarcity, approaches the ideal of a land where it is always afternoon.” The northern block has a few mineral deposits, not very rich and not all workable. Iron ore, in thin hæmatite shales assaying up to 55-65 per cent. iron, abounds within a radius of ten miles of the capital city, (Santow-Par area), and beds of massive limonite and nodules, working up to 50 per cent. and 32 per cent. respectively, are to be found in the Malwa plateau (Jat-Ratangarh, and Bagh), where the remains of about fifty indigenous furnaces manufacturing about 20,000 maunds of iron annually by crude methods can still be seen today. The industry died a natural death owing to the competition of cheap imported iron manufactured by modern methods, and now the high percentage of silica combined with the inaccessibility of these deposits militates against its utilization for smelting by modern methods. A languishing industry is still carried on around Gwalior, where the iron ore from the Santow-Par area, being in thin flakes, is easy to work, and has a reasonable chance of coming into use in future, although the absence of coal or cheap hydro-electric power in the State is a serious handicap.

*Pottery Clays.*—Next in importance to iron are the clays of Gwalior, which were experimented upon—about two decades

ago—for the manufacture of pottery wares. None of the clays could on analysis be classed as china clay, but they were mostly siliceous buff—clays resembling those of Dorset and Devonshire, where they are largely used for deep cream-coloured and light buff glazed tiles.

In view of the fact that good quality pink felspar and 99 per cent. quartz is available in abundance for body and glaze, a small experimental scheme was immediately sanctioned by His Highness which, as a result of its successful working, was expanded into the present Gwalior Potteries, Ltd., with an authorized capital of 10 lakhs, an enterprise which offers much promise for the future. A clay deposit which is found to be that of kaolin, near the historic Kutab Minar at Delhi, has also been purchased, and a branch pottery works established there also. Both these potteries are manufacturing acid-proof jars, flooring tiles, electric insulators, hospital requisites and household crockery.

*Building Materials.*—By far the most numerous and extensive deposits in the State consist of building materials (Vindhyan sandstones and limestones), which are of the highest class and which are to be found in almost every district. The ancient buildings and temples in the Gwalior Fort, the historic palaces, the tomb of Muhammad Ghau, and other old buildings scattered throughout the territories of the State testify to the lasting quality of this material. It is soft and easy to work for carvings, and it withstands the ravages of time and weather exceedingly well. Dr. E. W. Vredenburg of the Geological Survey of India remarks that “The Gwalior sandstones are remarkable for their fineness and evenness of grain. They are of very pleasing colour, white or pale buff, acquiring with age a beautiful warm gold tint. Some varieties are pink. One particular kind of pale greenish-grey stone is of such extremely fine grain that unless examined with a lens the component parts are scarcely visible; it is suitable for the most delicately carved ornaments. For the ornamental

parts of the building nothing could be more suitable than these beautiful materials, especially with the additional charm of the exquisite decoration which the accomplished stone carvers of Gwalior supply at such moderate terms."

A peculiar band of variegated marble of conglomeratic nature, 3 to 4 feet in thickness, also occurs at Gohara, near Sabalgarh. It is reported that "the marble would be suitable for monolithic columns, large bold mouldings, plinths, dados, margins for panels, flooring tiles, etc."

A cement works with an authorized capital of 40 lakhs is utilizing the extensive limestone deposits, which are of very good quality, for the manufacture of Portland cement. The works are equipped with the most modern cement manufacturing machinery, the whole process being continuous, and all machinery is electrically driven from power generated on the spot.

Of the other mineral deposits, ochres, mica, bauxite, garnets and galena may be mentioned to be of any importance.

*Forest Produce.*—The Gwalior State has 1,800,000 acres of land, about 11 per cent. of its total area, under forest reserves. *Boswellia serrata*, which exudes an important oleo-resin, occupies the bulk of the Gwalior forests, about 800 square miles, and is still awaiting commercial exploitation. Much preliminary chemical work in the Imperial Institute, London, the Forest Research Institute, Dehra Dun, and the local Scindia Chemical Laboratory, has been done on this oleo-resin, which yields 8 per cent. of pure pinene oil (turpentine equal in quality to American and French oils), about 55 per cent. of resin and 33 per cent. gum. There is much potential wealth in this substance, and the *Boswellia* forests, like the pine, may become one day the centres of an industry not only in Gwalior but for the whole of Central India and the Bombay Presidency. The industry would require the most suitable commercial plant for preparing the products under local conditions, together with tapping operations extended over large areas.

Of timber there is none except a little teak of inferior quality, but whole forests abound in trees suitable as wood fuel, and samples of three kinds of woods sent to Germany and Glasgow for experiments in destructive distillation gave the following results. This is another forest industry which is awaiting exploitation :

Name of Wood.	Contents of Water per Cent.	Field in Pounds per Ton.				
		Charcoal.	Acetate of Lime.	Crude Wood Spirit.	Tar Oil.	Tar.
Acacia catechu ... ..	13	821	56	19'5	11'2	74
Boswellia serrata ... ..	23	670	33	30'0	10'7	87
Anogeissus pendula ... ..	14	758	101	32'5	14'6	130
Above three woods together	18	806	51'3	3 galls.	—	112

Woods suitable for match manufacture, host trees for lac propagation, tannin-yielding plants and oil-yielding materials also exist, most of which are utilized. There are also trees and shrubs that yield valuable fibre, grasses that have been very favourably reported upon as suitable material for paper pulp. An important grass, *Cymbopogon Martini*, that yields the palmrosa oil of commerce, also grows in one district. Its plantation over an area of 500 acres was tried by the local State Laboratory, and good distillation results having been obtained, it was handed over to a private concern known as the Gaekwar Oil and Chemical Co., who are now distilling about 2,500 lbs. of palmrosa oil annually. This firm, incorporated in Baroda with an authorized capital of 50 lakhs, also crushes about 200 maunds of edible oil seeds per day, and further manufactures disinfecting fluids and varnishes, the total annual output of which is 20,000 and 8,000 gallons respectively.

*The Gwalior Engineering Works.*—The State maintains an up-to-date workshop, the biggest in Central India, known as the Gwalior Engineering Works. It has five main sections. The foundry department can undertake plain or intricate castings, such as ornamental gates, railings, cylinder heads, road roller wheels, etc. There is a machine and



erecting shop, loco and carriage and wood work and furniture shops, and silver and gold sections, which turn out every sort of European and Indian articles both for domestic and presentation purposes, either of sterling silver or in the best electro-plate. The shops are fitted with modern lathes, drilling, planing, shaping machines, and line shafts for turning out all sorts of iron and metal ware. The entire workshops are run by electricity.

*Leather Factory.*—The Gwalior Leather Factory, Tannery and Tent Factory is a prosperous concern which was started in the year 1898 and is well equipped with up-to-date machinery. It manufactures saddlery and harness of all kinds, including plain, military and police saddles, single and pair harness of the best English patent or tanned leather, or locally tanned leather portmanteaus, handbags, dressing bags and cases, holdalls, ladies' and gentlemen's boots and shoes, and military boots, etc., are manufactured in large quantities. During the Great War the services of the factory were offered to the British Government, and fully taken advantage of by the Indian Munitions Board. It has to its credit the supply of more than 20 lakhs' worth of harness and saddlery and other leather goods. The tent factory makes tents of various descriptions, and the entire factory supplies all the needs of the Gwalior Government, Army and the Police, and is patronized by most of the important Indian States.

*Textiles.*—The hand weaving industries, here as everywhere, have suffered serious set-backs owing to the competition of mill-manufactured material, and only those handloom working families now exist which by virtue of their exquisite workmanship have failed to be beaten by the power of the machine. Chanderi, a town about 150 miles south of the capital city, enjoys a well-deserved reputation for its fine muslins, which are renowned on account of their exquisite fineness of texture and excellence of manufacture, as well as the blending of gold and silver designs in the body of the weave. They are manufactured both in silk



and cotton, and in a variety of delicate shades of colour. A common saying refers to this industry :

Shahar Chanderi Mominwara,  
Tiria Raj, Khasam Panihara,

(In Chanderi town, in the weavers' quarter,  
The wives rule, and husbands draw water.)

The origin of this saying is said to be the fact that weavers must keep their hands soft, and women's hands, which are naturally so, must be preserved from becoming hard through household drudgery. All the manufactured goods are still stamped with the crest of the former Bundhela chiefs of that part of the country, a lion rampant.

A mill known as the Jayaji Rao Cotton Mill was started at Gwalior in the year 1923 with a capital of 35 lakhs under the managing agency of Messrs. Birla Brothers, Ltd., Calcutta. The Maharaja gave 18 lakhs of rupees as loan in debentures. It is now the biggest and best managed mill in Central India. There are about 30,000 spindles and 800 looms, with a complete mechanic shop and arrangement for dyeing and bleaching cloth. About 5,000 hands are employed. The mills are working double shifts and produce about 30,000 lbs. of cloth per day of 20 hours (2 shifts). The total amount of cotton consumed during the year is valued at about 50 lakhs of rupees, most of which (15's and 20's count) comes from Ujjain (Malwa) and Rutlam State, and some (10's and 12's count) from districts around Agra and Delhi. Long cloths, sheeting and dyed goods are among the chief products. Recently the manufacture of hosiery has also been started on a large scale, and is making satisfactory progress. Half the manufactured cloth is consumed in the State, and the remainder is exported to Amritsar, Cawnpore, and Delhi.

The mill has provided well-built quarters for more than 1,500 families, with excellent arrangements for the supply of water, electric light in compound, and sanitation. It maintains a free hospital and school for boys and girls. A

big hospital and maternity ward, crèche, market, and school are under construction, which, when ready, will give the mills the aspect of a small but complete industrial settlement.

Great credit is due to the mechanical workshop of this mill for its remarkable achievement in the construction of an entire motor-car exclusively from Indian material with the exception of the magneto, carburetter, the tyres and tubes. With the exception of these four things, every part of this car was cast and moulded and fitted up by them. The makers claim that this is the first car ever made in India. It is a four-cylinder, 14.75 h.p. machine, and can travel at a speed of 45 miles per hour.

Besides this mill there are three more cotton spinning and weaving mills in Ujjain, the former capital of the State in Malwa. The Binod Mills has a paid-up capital of 21 lakhs, and has about 16,000 spindles and 540 looms. The other, the Nazar Ali Mills, which is entirely a private concern, has 15,000 spindles and 264 looms. A third one, the Sipra Cotton Spinning and Weaving Mills, Ltd., has a capital of 25 lakhs. Sir Hukumchand Kt. of Indore, has of late secured permission for the construction of a big cotton mill at Madhonagar, Ujjain, and the construction work has already been taken in hand.

*Irrigation Works and Communications.*—The Gwalior State is not a level piece of country with flat surface slopes, as in the Punjab or the United Provinces, traversed by large rivers. It consists of high sloping uplands studded with numerous hillocks, and of small pieces of flat land in the valleys. The rainfall being very precarious and the nature of the soil porous, a considerable need for irrigation exists, especially in the northern tract of the State. From time immemorial the agricultural classes in the State recognized the value of storage reservoirs. Some of the large old tanks are still extant, but a great many of them became damaged during the stormy periods of Indian history in the seventeenth and eighteenth centuries. Some

effort to restore them and construct new ones was made before the time of the late Maharaja, but it was left to His late Highness to organize a regular Department for Irrigation Works, and utilize the services of eminent engineers, as a result of which there are now 723 minor tanks, 141 major works, and four very big schemes in the charge of the Department. The Department has spent about 93 lakhs in the constructed works, and about 21 lakhs' worth of important works are in progress.

The Gwalior State has 2,000 miles of fine metalled road, and is traversed by the Great Indian Peninsula and the Bombay, Baroda and Central India Railways over a total distance of 265 and 180 miles respectively. The Gwalior Light Railway—a 2-foot gauge line—covers a total distance of 250 miles, and yields a fair dividend on the capital invested, and has in famine time proved of incalculable benefit in carrying supplies of food to the more remote tracts in Northern Gwalior. That the gauge of this State Railway is only 2 feet instead of the more economic 2 feet 6 inches is due to the fact that the line had its birthplace in the Maharaja's Palace Grounds, where the late Maharaja, when in his teens, his interest centred in locomotives, toyed with a 2-foot engine and seven miles of track which ended in a favourite shooting box. Later, when he began to administer his State, he thought fit to utilize the already constructed portion in building a commercial light railway.

From these brief notes it will be apparent that the industrial and commercial possibilities of Gwalior State are very considerable. Along several lines, promising developments have been initiated. The State is at present administered by a Council of Regency: and the young Maharaja, when he succeeds to the throne of his ancestors, will doubtless throw himself as keenly into the task of forwarding the interests of the State and the prosperity of her people as did his illustrious father, the late Maharaja.

EXPORTS AND IMPORTS OF THE GWALIOR STATE,  
1925-1926

					IMPORTS	EXPORTS
					(VALUE IN RS.).	(VALUE IN RS.).
Grains	...	...	...	...	38,81,263	1,45,24,236
Sugar, etc.	...	...	...	...	92,33,583	67,700
Oilseeds, ghee, and kerosene	...	...	...	...	31,27,312	80,80,328
Grocery	...	...	...	...	35,45,195	27,34,382
Metals	...	...	...	...	22,60,769	1,48,106
Fibres (cotton, silk, and wool)	...	...	...	...	1,39,47,104	3,16,299
Intoxicating drugs (excluding opium)	...	...	...	...	4,20,033	77,196
Fireworks and explosives	...	...	...	...	80,047	1,462
Dyes	...	...	...	...	1,35,166	842
Wood and fodder	...	...	...	...	17,51,419	7,73,356
Stones and clay	...	...	...	...	1,86,606	2,63,922
Haberdashery	...	...	...	...	24,04,846	93,154
Cattle and leather	...	...	...	...	8,57,054	43,17,368
Miscellaneous	...	...	...	...	20,94,428	2,53,16,401
Grand total	...	...	...	...	4,39,24,824	5,67,16,752

## CHAPTER V

### ECONOMIC DEVELOPMENT IN TRAVANCORE

BY MAURICE EMYGDIUS WATTS, B.A., BARRISTER-AT-LAW  
(Late Dewan of Travancore)

#### ECONOMIC CONDITIONS, TRADE AND COMMERCE

THERE are no lords spiritual and temporal in Travancore. Consequently its peoples know no narrow preserves of exclusive political authority nor emulate traditional standards of high life. For better or for worse, her body politic is essentially a bourgeoisie, made up of true yeomen and adaptive tradesmen, which for some time past has been steadily throwing off by-products in lawyers, schoolmasters, doctors and engineers and, still more recently, a coralline outcrop for the fourth estate. In predicating of these people all the goodness and badness of middle-class ways of living and thinking, it is necessary also to take count of the fact that they are not "oriental" in the connotation of the term dear to western minds steeped in tales of the thousand-and-one nights, of the crusades, of Mogul splendour and of Persian courtliness. No less is it important to bear in mind that an orderly and benevolent government, amenable to democratic influences and absorbent of constitutional ideas, does more for the well-being of the dwellers in this land of languorous fertility than the most ardent socialist expects to realize in England "in our own time." And, be it cause or effect, they are a kindly, easy-going people, plain living, and blessed with the priceless gifts of a sense of humour and a capacity for enjoying life to the full, if simply. In view of all this, no surprise will be felt at the statement that in general an easy competency prevails and that the economic conformation of the country, if on a dull level, affords comfortable going. But what economist, faced with the discovery of a people in such a state of contentment, will forgo his whys and his wherefores?

Until its population mustered and bred beyond the capacity of its food production, Travancore was self-supporting agriculturally. But although now, crowding 888 persons into the square mile, it is no more able to feed itself than England, the people still, at the back of their minds, measure wealth and respectability in terms of land-owning; and visionaries still dream of days to come when four or five millions will be able to procure their staple food from a million and a half of acres! The staple food of the more well-to-do classes is rice and of the less well-off classes tapioca, in both cases supplemented, but only supplemented, by vegetables, fruit, and fish. The area under rice in 1928-29 was only 669,275 acres, and the land in the State suitable for rice cultivation cannot, it is estimated, exceed 750,000 acres. The yield is already high as the result of elaborate systems of irrigation and the growing use of artificial fertilizers and scientific methods taught and fostered by an able and up-to-date agricultural department. But no amount of intensive cultivation over the very limited area available can keep pace with a dense population steadily increasing at the rate of 16 per cent. per decennium. The area under tapioca or the manioc tuber was in 1928-29 485,237 acres. This area can hardly be increased appreciably without the sacrifice of more profitable forms of cultivation. In the result Travancore has to turn to external sources of food supply or starve. The chief staple food rice, both husked and unhusked, imported into Travancore in 1928-29, alone amounted to 1,621,259 cwts. to the value of Rs. 4,572,692, or over £3,000,000. Although this is the most important item of import, it represents less than a third of the total imports, the value of which in 1928-29 was Rs. 93,290,681, or £7,000,000. Naturally the State has to pay for these heavy imports. The value of the total export trade in 1928-29 was Rs. 118,042,935, or £8,854,000, showing an excess over imports of Rs. 24,752,255, or £1,854,000. The balance of trade in favour of the country was thus, on visible results,



Rs. 6.17 *per capita* on the population as at the census of 1921, or Rs. 5.5 on the present estimated population of  $4\frac{1}{2}$  millions.

In this traffic of goods the commodity upon which Travancore most relies to pay for its requirements in the matter of imports is the produce of the coconut palm, which largely makes up the superfluous wealth of the land. M. Maurice Dekobra, in his "*Les Tigres Parfumes*," said the other day of Travancore: "*Les cocotiers y jaillissent de terre en feuz d'artifice de verdure pressés d'ételer leurs palmes.*" The traveller along a hundred and fifty miles of continuous waterways witnesses the unceasing activity of men, women and children toiling, in Pierre Loti's description, "under the gloomy vault of the eternal palm," ministering to it as befits beneficiaries from it, for the coconut tree thrives, so they say, only to the music of the human voice and of the pestle pounding in the mortar. In school-spangled Travancore the young idea is periodically called upon to express itself on "the uses of the coconut tree"; and it usually takes, and certainly requires, a full-length essay to do justice to the subject. But for the purposes of the economist and the business man, it will suffice if Travancore's external trade in respect of it (£2,090,000 in 1928-29) were listed under its chief items. The area under coconut in 1928-29 was 526,950 acres.

### A.—EXPORT TRADE

#### I. *Exports of Produce of the Coconut Palm (1928-29)*

NOTE.—Items marked with an asterisk are subject to export duty, and sterling amounts represent values at point of export.

	Quantity.	Value.
		£
(a) Copra* ... ..	421,064 cwts.	573,489
(b) Oil* ... ..	433,893 "	488,138
(c) Nuts* (number) ...	22,146,045	58,354
(d) Oil-cake* ... ..	231,301 cwts.	86,738
(e) Coir yarn and fibre*	728,592 "	842,166
(f) Coir matting ... ..	4,275,873 yards	318,877
(g) Coir mats ... ..	173,382 cwts.	312,858
(h) Coir rugs ... ..	327,656 yards	24,094

By far the greater portion of the trade in these goods is seaborne to countries outside India. In respect of copra, because of the thickness of the kernels, the greater oil-content and the continuance of traditional methods of careful preparation, the Travancore article still commands a good price in competitive markets, though often bearing trade-names of outside ports. But in respect of coconut-oil, the foreign trade is not progressive. Older cyclopædias show the oil as used for soap and candle-making. Besides these purely industrial uses, it enters into the manufacture of cosmetics, paint, varnish, linoleum, lubricants, and the processing of tin-plate and leather. But more valuable uses for it have been found of late, mainly in food values, to make good the shortage in dairy and animal fats which the western world has been experiencing; and coconut-oil now enters largely into the making of artificial butter, lard, shortenings and dressings. The growing demand has not, however, benefited Travancore as much as might have been expected owing to the chemical improvement now developing of inferior substitute oils, such as peanut, cottonseed, and palm-nut; and to the no less important competitive factor of the rapid expansion of cultivation in the Philippine Islands, the Dutch East Indies, and Malaya. In the Philippines alone the area under coconut has increased from 405,000 acres in 1910 to 1,200,000 acres in 1926. Unless world-factors are studied and allowed for, high-power machinery employed for a maximum oil-extraction, and scientific processes of refinement and hydrogenation adopted, the State's trade in coconut-oil must inevitably suffer seriously if it is not elbowed out entirely from the European market. In respect of coir yarn, mats and matting, Travancore still holds pride of place in the world's markets. This is mainly due to local conditions, which so far, not successfully established elsewhere, give the Travancore fibre a special value and quality. Efforts to manufacture mats and matting from imported Travancore fibre and yarn have been

made in Europe and the United States. But whether as the result of the Travancore protective tariff on coir fibre and yarn or of the high cost of manufacture abroad, the State's trade in this industry has not suffered appreciably. Here, too, in the interests of the economic condition of the people, it is necessary for the Travancore Government to study the position from day to day and to take whatever safeguarding measures occasion may demand.

## II. *Exports of Tea and Rubber (1928-29)*

	Quantity.	Value.
Tea* ... ..	30,452,556 lbs.	£ 2,282,682
Rubber ... ..	9,291,799 "	437,576

The area under tea in 1928-29 was 71,304 acres and of rubber 56,564 acres. In both cases the bulk of the ownership is in the hands of Englishmen, especially in the case of tea, to whose enterprise and capital the development of the industries is due. Much of the Travancore tea is grown at high elevations and commands a price comparable with good class Ceylon, Assam, and Bengal tea. The State derives a revenue of £ 35,000 a year from a small export duty on tea. In the case of rubber, too, most of the estates are owned by English companies or individuals; but Indian-owned estates are not inconsiderable. Although the cost of production is comparatively low in general, the industry in Travancore cannot live on rubber at 4d. a pound, and is already suffering an acute depression.

## III. *Exports of Pepper (1928-29)*

It is safe to assume that when the Queen of Sheba tested King Solomon's wisdom and tasted his dishes and that when Cleopatra treated Antony to that very special banquet, their feasting was made the more pleasurable for the seasoning with Travancore pepper in much the same way as jaded latter-day palates the world over are still titillated by the self-same spice from the self-same land; for from those far-off days to our own time ships have sailed, battles have been fought, treaties have been made,

and merchants have waxed rich all because the pepper-vine twines and thrives with no trouble to anyone upon the trees of every back garden in Travancore. The well-being of the people of Travancore may well be described as pickled in pepper for two thousand years. The compilers of the annual Statistics of Travancore make no mention of the acreage under pepper in the State. They may be forgiven: as well attempt a census of Mr. Punch's aspidistra in suburbia. Regular readers of the "Home Commercial Markets" column of *The Times* know that Alleppey (Travancore) pepper always commands a higher price than that given for the spice shipped from the new competitors of Singapore, Lampong and Muntok; and America and Italy are also learning to value this quality. In trade results these are the last returns from Travancore:

	Quantity.	Value.
Pepper* ... ..	19,187,000 lbs.	£1,404,759

The Travancore Government levies a duty of Rs. 10 on every candy (500 lbs.) of pepper exported.

#### IV. *Other Considerable Items of Export (1928-29)*

	Quantity.	Value.
		£
(a) Lemon-grass oil* ... ..	793,711 lbs.	297,643
(b) Areca nut* ... ..	4,156,500 "	129,582
(c) Ginger* ... ..	67,942 cwts.	186,445
(d) Fish* ... ..	224,044 "	168,750
(e) Prawns* ... ..	49,409 "	138,963
(f) Cardamom ... ..	38,529 "	167,652
(g) Timber ... ..	710,173 cub. ft.	92,961
(h) Bricks and tiles (number)	7,903,098	15,279
(i) Manure—vegetable, fish and prawn-skins ... ..	54,403 cwts.	16,141
(k) Palmyra brush-fibre ... ..	17,538 "	23,039
(l) Jaggery* ... ..	66,360 "	49,770

The articles for regular export detailed above have been long established in the trade of Travancore. A great many more might be included, ranging from turmeric, nux vomica, cinnamon, garlic, and chillies to bamboos and boats, fish oil, conch-shells, and shark fins. In addition to the manufactured goods, such as coir mats and matting, and oils, already mentioned, which form large exports,

other goods manufactured in the State and exported include matches, soap, earthenware, furniture, spirits, bell-metal ware, grass mats, and paper, many of them of appreciable and growing value. To indicate how trade in new directions has been opened up in recent years might be mentioned the following :

#### V. Export Trade Recently Developed

	Quantity.	Value.
		£
(a) Ilminite ... ..	451,600 cwts.	38,417
(b) Zircon ... ..	21,140 "	4,741
(c) Cashew-nuts ... ..	63,034 "	31,899
(d) <i>Vateria indica</i> ... ..	5,055 "	1,179

With these may be included the nuts of the talipot palm, which bears only once in a lifetime of forty years. The kernel of this nut is used for button-making, and Italy takes most of the export. Ilminite, which forms one of a sand group including zircon, monozite, and garnet-dust, is separated from its associates by electro-magnets and, through the enterprise of two London firms, is developing in use to supplant white lead in paint. Monozite used to form a very considerable article of export from Travancore, but the trade has rapidly dwindled since the war with the decline in the demand for gas-mantles. There is a steadily growing demand for cashew-nuts, and the great bulk of the trade in it is with the United States of America, where the taste for the crisp and pleasant kidney-form kernel seems to be well established. The acrid oil given out in roasting the shell is a powerful protective for timber against decay and destruction by insects, but its employment so far is only local. *Vateria indica* grows luxuriantly in the evergreen forests of Travancore, and a shade-loving English chief engineer many years ago planted it in avenues on scores of miles of road in the State. A commercial use, in addition to its umbrageous value, has lately been found, thanks to the enterprise of another Englishman. The kernel is now exported to Europe and America, where it is used for the better kinds of artificial butter and for stiffening chocolates. Mica mining



has recently shown signs of revival. The export of poultry is also quite a recent development and is stimulating poultry raising as a cottage industry, especially in south Travancore. The bulk of the export is to Ceylon, mainly, it is understood, for the provisioning of ships. There are still many directions in which the export trade can be opened up. For instance, there are extensive beds of kaolin which, on analysis in London, has been found to compare favourably with the best Cornish china-clay. There are inexhaustible supplies of silicic sands eminently suitable for glass-making. Gold has been found in sands brought down by the rivers and secondary precious stones, such as neighbouring Ceylon produces in abundance, are often dug up. The existence of deep-hidden oil has been suggested; and certainly the stilled-waters that make Alleppey a safe port are an emulsion of oil from no one knows where whipped up with a fine decolourizing mud. Iron ore exists, and there is a credible tradition that ingots of a particularly hard kind were long ago shipped regularly to Damascus, while domestic implements of steel made from the same iron are to this day handed down from father to son as incapable of being worn out. A variety of bark is collected in the forests which, as local experience and scientific experiment have shown, yield valuable dyes and tanning material. There are some 2,500 square miles of State forests, rich in possibilities of fine timber and soft woods, which have been for the past fifty years jealously conserved and scientifically regenerated while, without exacting exploitation, yielding a substantial net revenue every year to the State. The industrial possibilities of a vast population, intelligent beyond the average and gifted with an aptitude for finished craftsmanship, are great; but the direction of these talents into general effective achievement will, it is feared, become effective only under the stress of a widespread economic need which in the no distant future must drive the people to manufacture for themselves the wealth of raw produce which is now so readily hoisted away for a general easy com-



petence. Although the country possesses no factory power in coal or oil, there are great waterfalls, twelve of which have already been investigated, which, when demand and the occasion require, can be made to yield cheap power of tremendous capacity. But the time is not yet. Meanwhile, a distributive and co-ordinative system of railway development, calculated to serve densely packed productive areas and ports and markets ripe for stimulation, awaits imagination, courage and capital for a consummation of forces necessary to establish, beyond danger of overbalancing, an economic position which already calls loudly for stabilization.

### B.—IMPORT TRADE

The value of goods imported into Travancore in 1928-29 amounted to £6,996,800. They covered practically every known requirement of a people living under modern civilized conditions, from the necessities of life to its luxuries. The bulk of the people's needs from the outside world is in the form of manufactured goods, and of these, both in volume and in value, the country imports mostly from or through British India, with direct imports from the United Kingdom, followed by those through Ceylon, of quite appreciable extent, while those from other European countries and America are sufficiently noticeable to have columns to themselves in the State's statistical tables. To detail or even set out a group-classification here is out of the question. A bare indication of the more considerable or interesting imports must suffice.

#### *Goods Imported in 1928-29*

	Value.
	£
Piece goods, cotton goods, and textiles ...	1,156,546
Tobacco, including manufactured ...	389,802
Sugar ... ..	115,467
Kerosene oil ... ..	220,202
Petrol ... ..	154,658
Foreign wines and liquors ... ..	27,855
Iron and steel (manufactured) ... ..	202,714
Motor-cars and accessories ... ..	87,975
Machinery ... ..	108,381
Paper and stationery ... ..	59,618
Medicines, chemicals, and surgical instruments	74,517

This list does not include imported commodities which are the produce of the neighbouring districts of British India, although many such are of considerable value. Other articles of import of very appreciable value, and for the most part manufactured or produced outside India, include metals such as lead, copper, zinc and tin, and articles manufactured from them; enamelled ware, glassware, crockery, plywood for tea and rubber chests, cutlery, cement, paints and colours, aniline dyes, artificial manures and fertilizers, clocks and watches, gramophones, umbrellas, etc.

### C.—BALANCE OF TRADE

The total value of the export and import trade of Travancore during the past five years was :

	1924-25.	1925-26.	1926-27.	1927-28.	1928-29.
	£	£	£	£	£
Exports	7,280,000	7,500,000	8,555,000	8,888,000	8,850,000
Imports	4,280,000	4,500,000	4,620,000	6,179,000	6,997,000
Total	11,560,000	12,000,000	13,175,000	15,067,000	15,847,000

Thus, although the total foreign trade of Travancore has been steadily growing, the visible balance of trade in favour of the country has been declining. On a population of a little over 4 millions in 1921, the favourable balance of trade *per capita* was in 1924-25 and 1925-26 Rs. 10, and in 1926-27 Rs. 13. It fell in 1927-28 to Rs. 9, and in 1928-29 to 6.2. It may be that this adverse position is only a passing phase; but it is no less likely that the position may get worse in view of the increasing demand for foreign goods to meet developing requirements in luxuries and the conveniences of life which the higher standards and the calls of a more complex civilization make more and more insistent. Another factor is that rapidly growing production elsewhere might retard proportionate expansion in the demand for raw produce for which it has so far found a ready and steady market.

## D.—TARIFF

Apart from the general economic advantages, direct and indirect, of the foreign trade of Travancore, it is of considerable bearing on the public revenues of State. Export duties are levied, mostly on a scale of tariff valuation, on sixteen groups of goods, whether exported by sea or land; on certain grains if exported anywhere by sea alone; and on two groups of goods if exported by sea alone to countries other than British India or the neighbouring State of Cochin. In respect of imports—excluding tobacco, opium, spirits, and salt, on which it collects its own rate of duties—Travancore levies import duties at its ports on the same tariff scales as prevail in British India other than on goods manufactured in or the produce of British India or the Cochin State, which come in duty free. Nor does Travancore levy duty on goods, other than the excluded group, which have already paid duty in British India before entry into the State. These arrangements were effected by an Interportal Trade Convention entered into in 1865 by the Governments of Travancore, Cochin, and British India—an arrangement which, so far as imports are concerned, is seriously prejudicial to the revenues of Travancore, since, compared with corresponding areas in India, the State has a high consuming capacity. The British Indian Government reaps the benefit of duties on goods landed there and passed into Travancore for consumption. In other words, the revenues of Travancore lose the duties which it should have as buyer and consumer while the British Indian Government collects an unearned increment of what in reality resolves itself into a transit duty pure and simple—an impost anathema to modern ideas of fiscal principle. The duties thus lost to Travancore already far exceed £100,000 a year, which would be no inconsiderable addition to the State's annual revenue from customs of about £250,000 a year. Incidentally, conjecture might be ventured as to how Travancore will fare if "Empire Free

Trade," at the moment the subject of so much intensive propaganda, should come to be the governing British fiscal principle.

### E.—SHIPPING

Closely touching the trade and commerce of Travancore is the question of its shipping. There are four active ports in Travancore, which is one of the very few maritime States of India and claims to be the most important of such. Unlike Quilon, Trivandrum, and Colachel, which have to suspend operations during the worst months of the monsoon, Alleppey is an active port all the year round. The increase in shipping at the ports during the past few years has been nothing short of phenomenal, as the following figures show :

	1923-24.	1924-25.	1925-26.	1926-27.	1927-28.	1928-29.
Number of vessels which called ...	439	453	411	514	607	822
Tonnage ...	535,070	661,812	760,587	873,856	972,361	1,264,705
Value of seaborne trade ...	£2,002,000	2,520,000	3,525,000	4,223,000	4,666,000	4,930,000

Thus, in the six years, the tonnage shows an increase of 136 per cent. and the value an increase of 146 per cent. By far the best part, both of shipping and seaborne trade, fell to the principal port, Alleppey, where the number of vessels that called rose from 246 in 1923-24 to 572 in 1928-29, and the tonnage from 441,231 to 939,966. This rise is all the more remarkable in that the neighbouring British Indian port of Cochin has recently been improved somewhat ambitiously and at great cost. The explanation is that the Travancore ports serve a much richer hinterland and are now well served by communications. Inexpensiveness is another consideration; and there are also the advantages the Travancore ports possess of being practically on the main ocean route for shipping from Suez to Colombo, the Bay of Bengal ports, the Far East and Australia, and of requiring neither the delay nor the expense of piloting, since ships can enter port, anchor in deep water within easy distance of the shore, and stand out to sea again soon after loading. It is also noteworthy that most of the sea-

borne trade of Travancore is carried by ocean-going vessels, since the State deals more with countries outside India than in coastal business. Although the tonnage calling is preponderantly British, chiefly vessels of the Clan, City and Hall lines, Alleppey is becoming increasingly popular as a port of call for Italian and French ships, while American boats too have not been infrequent in the past few years. The Travancore ports cannot aspire to rank in the first class or as ports of final destination; but they can, without difficulty, be developed into useful ports of call and be made even more profitable than they are at present. They are so placed that in olden days they were the principal outlets for trade and commerce from what are now the more southerly districts of the Madras Presidency; and with a judicious linking up with the existing metre-gauge railway system of South India, trade can again naturally flow into them, provided there is no forced deflection elsewhere.

#### F.—CONDITIONS FAVOURING BUSINESS

In considering the possibilities of trade expansion in a particular country, it is necessary to examine not merely the commodities it can supply and take, but also the question of the conditions which surround and affect the security of capital, the sustainment of enterprise, and the facilities that ensure the convenience and well-being of business relations. Readers in pursuit of an enquiry in these directions respecting Travancore will find a general description of the country in the April issue of this REVIEW, and will gather some idea of the stability which goes with a constitutional form of government in an article on the State in last July's number. No better evidence of a well-ordered administration, solicitous of the well-being of the people entrusted to its care, is needed than the statement of the revenue realizations and of the mode of its expenditure exhibited in the two graphs reproduced at the end of this article. Out of a total revenue of Rs. 25,000,000 (£1,875,000) a year, just over 19 per cent. represents

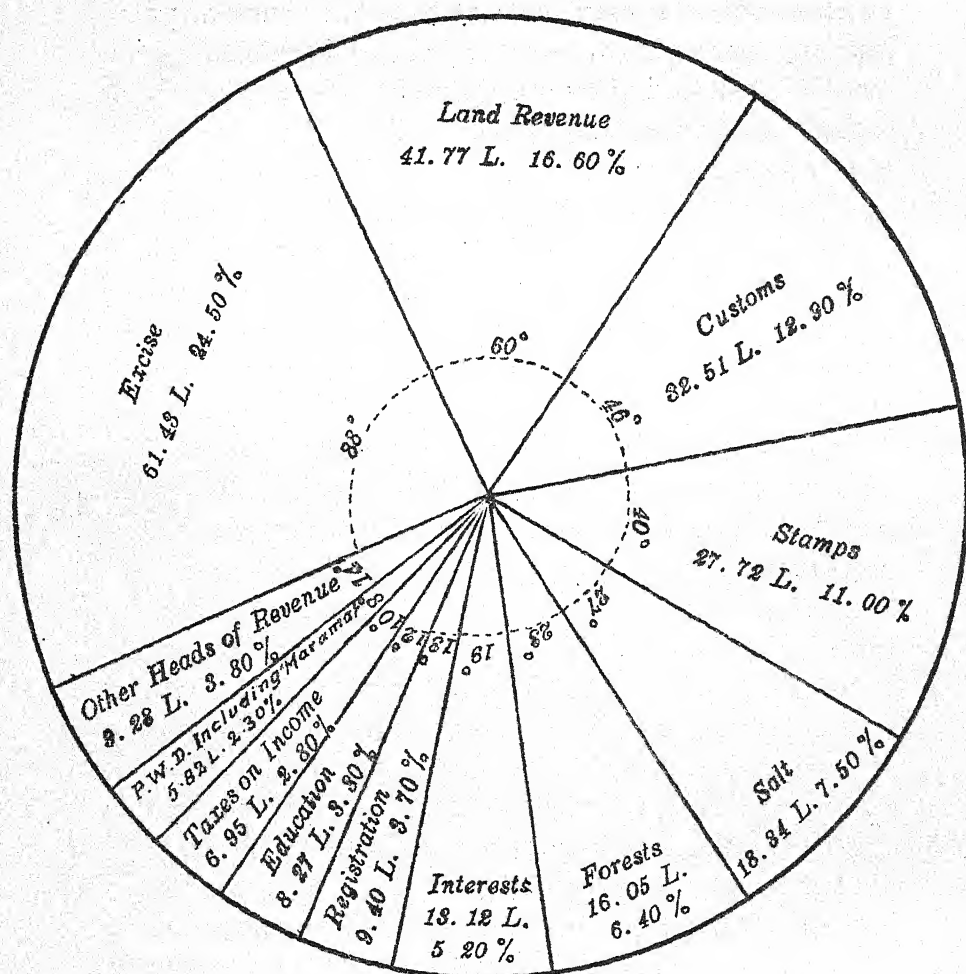


direct taxation, an incidence of a little more than one rupee (rs. 6d.) per head of population per annum, in the shape of a modest land tax and a trifling income tax; and there is deep significance in the fact that out of the revenues so little is spent on the ruling house and so much on education, so little on the staff employed on the general administration and so much on public works (mainly roads and communications), so little on the army and so much on medical aid and public health. In Travancore the State maintains nearly 5,000 miles of road—more than a mile to every square mile of territory excluding State reserved forests, every river and considerable stream in this much watered and mountainous terrain being repeatedly bridged—all this in addition to a network of navigable lakes, rivers and canals. It is small wonder that there is an incessant coming and going in the State and that the latest administration report pathetically observes that the phenomenal increase in motor omnibuses, cars and lorries necessitates strengthening of the police force for traffic control and enhancement of road-maintenance grants. The writer of the report finds consolation, however, in the fact that “all the world over conditions of road traffic have fundamentally altered during the last decade.” In Travancore all medical aid and medicines are provided free by the State, which maintains 32 hospitals and 50 dispensaries manned by 155 qualified medical officers, including women doctors, in addition to nurses and midwives. The State aids 18 private medical institutions and numerous practitioners of the Ayurvedic or indigenous system of medicine. The leper, the insane, and the incurable are specially cared for in institutions working on the latest line. In Travancore there is no labour trouble; for the largest mass-employers, the European tea and rubber planters, know the value of solicitude, and good wages and conditions attract ample and regular labour from less-favoured British Indian districts over the border. In Travancore life and property are safe, for the people are law-abiding and



contented, and a wholly literate police is kept efficient by good officering and strong public opinion. In Travancore there is no general financial helplessness, for money is well spread, and the people have a traditional way of mobilizing capital peculiar to themselves in the form of *chitties*, by which a body of subscribers contribute fixed sums at stated intervals over a term of years, and at each instalment period the pooled subscriptions are allotted to a subscriber by lot or by "downward" auction—a tontine system by which urgent need for capital is met and he who can wait longest gets most. Needless to say, these enterprises are regulated by law. In Travancore there are some 195 registered companies doing banking business, prosperous when the country is prosperous, largely preoccupied with the organization of *chitties* and in advancing money to landed, trading and industrial interests. A banking enquiry committee appointed by the Government has just submitted its report. These banks, more or less imitations of western models, are on a different footing from such well-known institutions as the Imperial Bank of India, which has branches at important centres in the State. At Alleppey there is a Chamber of Commerce, with the quality, rare in India, that the membership includes both European and Indian merchants, although wisely, for the present at any rate, control rests with a European majority on the committee. By an act put on the Statute Book ninety years ago, the rate of interest on loans is limited to 12 per cent. per annum, and the courts may not also allow accumulated interest in excess of the principal in some cases, and in others not more than half as much again. In Travancore the Government scrupulously respects, as it has done for generations past, the sanctity of contracts and engagements. In Travancore the rule of law is supreme, and a man, be he landlord or tenant, merchant or pedlar, master or servant, borrower or lender, buyer or seller, foreigner or native, private citizen or official, can take the law of his neighbour at much less expense than in England and with not much

more delay, at the hands of 74 busy civil courts ranging up to an overworked High Court of five puisne judges and a Chief Justice, all of which tribunals last year alone skillfully administered the law in original suits and appeal cases numbering 72,734 and 6,705 respectively, with the

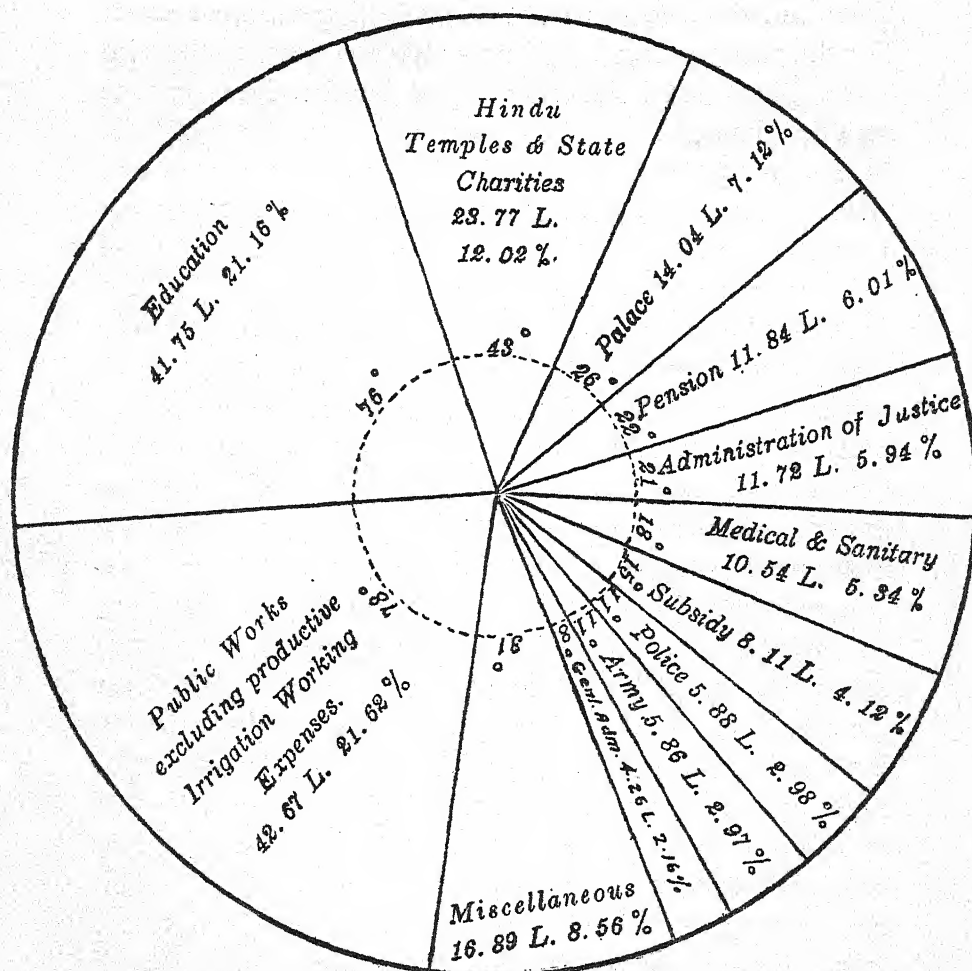


A.—DISTRIBUTION OF THE ANNUAL REVENUE OF TRAVANCORE, IN LAKHS OF RS. (1928-1929.)

laborious help of an army of lawyers. In proof of the advancement and prosperity of the country, it may be mentioned that one civil suit was last year instituted to every 55 of the total population. Decrees against the Government are satisfied as a matter of course and the executive

do not interfere with the judiciary, a judge being secure in office *dum bene se gesserit*—as to which only a royal commission can pronounce.

Having satisfied himself as to the stability of the Government, the security of life and property, the



B.—DISTRIBUTION OF ANNUAL EXPENDITURE OF TRAVANCORE MET FROM REVENUE, IN LAKHS OF RS. (1928-1929.)

reasonableness and orderliness of taxation which is always statutory, the prevalence of the rule of law, the existence of the conveniences and facilities of civilized life, and the prospect of continuity of effort, the prospective capitalist and merchant on caution bent will naturally turn to a survey

of the history of trade and commerce in the country. It is not necessary to traverse Travancore's trading history 2,000 years or so, nor even to go back to such recent times as the commencement of the British connection, which 125 years ago found Europeans, Parsees, and Saits already established as landowners, merchants, and shippers in the State. For the past 70 years Englishmen have opened up the wild places and, aided and encouraged by the State and its people, planted tea and rubber, until today they and the British Companies they represent are in the peaceful and untrammelled ownership of considerably over a quarter of a million acres in the State, while at the ports and at the commercial centres there is a score and more of English firms and business houses known in London's City busily engaged in manufacturing and mining, importing, exporting, and generally carrying on trade and commerce.

By far the largest number (67) of the 165 factories at work in Travancore are for tea-making, most being English owned. Of the others, 34 are tile factories, 20 make coir mats and matting, 12 are oil mills, and 3 are match factories. The power used is steam in 29, electricity in 13, gas in 50, and oil-engines in 25. In much the same way as the state of deposits in the Post Office Savings Bank of India reveals the economic pulse of the people, the position in regard to registered joint stock companies discloses the industrial prosperity of the country. Of joint stock companies limited by shares, registered and working in Travancore, there were 308 in 1928-29, with an aggregate authorized capital of £5,327,000 and a subscribed capital of £1,775,000. These companies are engaged in banking, trade, manufacture, and various forms of industrial activity. In addition there were 75 companies of foreign incorporation working in the State. Of these latter, 42 were incorporated in England and Scotland, 22 in British India, 5 in Ceylon, and one each in Australia, New Zealand, Germany, the United States of America, Switzerland, and Hongkong; 23 of them are engaged in insurance business, 25 in tea and

rubber planting, 16 in manufacture and general trade, 4 in banking, 3 in mining, and 2 in navigation. It is practically impossible to estimate the capital employed in Travancore by companies of foreign incorporation engaged in large business elsewhere as well. But there are very many of them, some well known on the London Stock Exchange, whose work lies entirely, or almost entirely, in the State, and a rough calculation in respect of them, as well as of English companies with Travancore registration alone, shows that the amount of English capital, found from Great Britain as distinct from British India, is in the neighbourhood of ten million pounds sterling. And much of it has been in the country for very many years.

#### G.—THE OUTLOOK

Although Travancore's trade was considerable in the remote past, it languished for a time until its greatest Dewan, Raja Kesava Das, organized and stimulated it afresh in the latter part of the eighteenth century. The impetus lasted for some time; but it was not till another great Dewan, Raja Sir T. Madhava Rao, realized that the prosperity of the State turned on the effective marketing of its produce and devoted his most earnest efforts to its development, under proper fiscal conditions and with suitable port facilities, that the trade and commerce of the State can be said to have been established in conformity with modern needs and conditions. This was in the sixties and seventies of the last century. In the furtherance of the policy thus adopted for Travancore, the services rendered by a succession of zealous English gentlemen in the employ of the State as commercial agents at Alleppey cannot be minimized. The abolition of that office several years ago was unfortunate; but the trade was of such sound intrinsic quality and so well established that, if it did not wax in strength as it might have done, it certainly did not wane during many years of *laissez-faire*. But circumstances are rapidly changing. *Quasi-monopolies* are disappearing

and competitive production is growing. Once more it is imperative for Travancore to think and act and organize as Raja Kesava Das and Raja Sir T. Madhava Rao did—not to regard itself as polype in polypidom, as a district of a province, but as a State with all a State's commercial attributes and responsibilities, to be exercised to the full to safeguard an imperilled economic position. Trade must perforce use its tentacles; and tentacles must seek and secure contacts.



## CHAPTER VI

### THE ECONOMIC PROSPECT BEFORE THE INDIAN STATES

BY JOHN DE LA VALETTE

[Mr. de La Valette, who has lived in the East Indies and the Near East, is a business man with a wide experience of industrial and financial development in various countries.]

NOT only politically, economically also, the Indian States are about to enter upon a new era. Throughout the longer or shorter histories of these States their dynasties have been keenly alive to the importance of their several rôles in the complex evolution of the vast peninsula of which their territories form part. Increasingly they have come to appreciate their respective relations with the Crown of Great Britain, relations which, without exception, they proudly cherish and jealously guard. But it is only within comparatively recent times that they have begun to realize that each one of their States is, both politically and economically, insolubly linked with every part of that Greater India which includes the Indian States as well as the provinces and territories under British rule. It is to the economic consequences inherent in this new outlook that it is proposed to draw attention in these few observations. That a true perception of the important changes which are about to take place in that great part of India which is ruled by its Princes must be of vital importance to the British business world, needs no argument.

VAST AREA OF THE INDIAN STATES.—Since the publication of that storehouse of lucid and abundant information, the first volume of the Simon Report, the British public is gradually becoming familiarized with the size and importance of the Indian States, and beginning to appreciate that they constitute “an outstanding feature which is without precedent or analogy elsewhere.” Thus by now we probably

all know that the five or six hundred States cover an aggregate area some eight times as large as England, Scotland and Wales together, with the Isle of Man and the Channel Islands thrown in for good measure. We are also aware that included in their number are such big States as Hyderabad and Kashmir, either of which embraces within its borders as much territory as that of England, Scotland and best part of Wales, and that at the other end of the scale we find States which barely cover a few acres. Finally we have been made to realize that the aggregate area of these States represents some 45 per cent. of the total area of Greater India (leaving out Burma, which, except in an administrative sense, forms no part of India) and that the population of the States (some seventy-two millions) is about one-fourth of the total. But even such figures are apt to leave but a vague picture in the mind's eye, and a comparison with Great Britain may be held misleading, once it is realized that the density of population here is some four and a half to five times greater than the average for the Indian States. As it is desirable that we should form an adequate background in our minds against which to outline the few economic vistas which it is proposed here to evoke, we may, perhaps, usefully begin by comparing these somewhat hazily visualized complexes of Indian lands with certain other countries, the economic value and importance of which are rather better known to us.

A COMPARISON WITH THE GERMAN REICH.—In seeking for some comparable area, the first inclination may be to look at the various States which form the German *Reich*. The absence of a joint central government in the Indian States, such as links the German States, need not necessarily deter us from pursuing an economic comparison. In Germany, as in the India of the Princes, we find a large number of separate States, differing greatly in size, differing also, even today, after the equalizing influences of the post-war revolutions, in system of government. The first thing that strikes us is that the area of the Indian States, some

seven hundred and eleven thousand square miles, is four times as great as that of the German States, whilst their aggregate population of seventy-two millions is one and one-eighth times that of the *Reich*. As in Great Britain, though not to the same extent, the German population is denser than that of the Indian countries—namely, about 347 per square mile as against 101.

When we compare individual States in the two complexes we find that Hyderabad, the foremost principedom in India, covering an area of eighty-two thousand square miles on the great Deccan plateau, exceeds with its twelve and a half millions of inhabitants the aggregate populations of Bavaria and Saxony. Mysore, the greatest of the South Indian States, with an equal area to Bavaria, counts six million souls against the seven millions of Germany's second greatest State. Kashmir, the vast, romantic mountain country, with a population comparable to that of Switzerland, and Gwalior, the agricultural State of the great plains which counts as many souls as Denmark, surpass by almost a million each the populations of such important German States as Wurtemberg and Baden, the latter of which, both in size and population, is exceeded by that progressive State, Baroda, or by the well-known Rajput State of Jaipur. Again, the premier Sikh State, Patiala, exceeds in size both Saxony and Baden, and is only out-distanced in population by the latter to the extent of a few hundred thousands of inhabitants. Were we further to scrutinize the list of German States and statelets—the Mecklenburgs, the Hessens, the Lippes, the Anhalts—we should have little difficulty in producing analogies from among the hundreds of Indian principalities, chiefships and feudatory territories and estates, in addition to which India would be able to supply a variety of examples for which it would be hard to find any parallel outside that complex peninsula.

If we attempt to pursue the economic comparison beyond the elements of size and population, we once more find con-

ditions too dissimilar to lead to any useful conclusion. The high industrialization of Germany and the different level of agricultural development ; the higher cost and scale of living ; the resulting difference in wages and a number of other factors preclude any endeavour towards drawing closer parallels. Then, again, the existence of a *Zollverein* between the German States and their financial and industrial coherence create a totally different set of fundamental conditions. We must, therefore, turn to a different part of the world to find countries which are based upon conditions sufficiently similar to those obtaining in India to supply full material for useful comparison.

A PARALLEL WITH THE SOUTH AMERICAN REPUBLICS.—Turning from the highly industrialized countries of Western Europe, let us seek this closer analogy among the republics of South and Central America. Here we find countries varying in size and population as much as the Indian States, yet in themselves not incomparable with several of the latter. Furthermore, we find the majority of them predominantly dependent upon agriculture and the bulk of the populations, especially in the tropical and subtropical parts, not far different in standard of living and wages from that of India. In addition, as in India, many of the South and Central American countries possess mineral resources, the exploitation of which contributes in varying degrees to their national prosperity. Before going deeper into these similarities and the even more illuminating differences between these republics and the States of India, it will be well to gather some general idea of their respective sizes and populations. Most of the South, as distinct from the Central, American countries include within their boundaries vast tracts of hardly populated and often hardly inhabitable lands, which add extensively to their theoretical areas without representing an equal addition in economic strength. As a result we find a much lower density of population in these parts of the New World than in India. As compared with an average of 101 inhabitants per square mile in the

India of the Princes, we find barely six per mile in Bolivia, eight in Venezuela, ten in Argentina, eleven in Peru, and some thirteen or fourteen in Chile and Colombia. In the primarily pastoral republic of Uruguay, the mainly agricultural little State of Costa Rica, and the vast and rich areas of Mexico, the density rises to nineteen or twenty per mile, whilst Guatemala, so largely dependent upon its coffee crops, reaches the maximum for South America with an average of forty-eight inhabitants to its forty-two thousand square miles. It is only when we come to the almost exclusively agricultural little State of El Salvador, with its extensive small holdings, that we find anything like the Indian density of population—namely, one hundred and thirty per mile.

But if, ignoring mere acreage, we compare populations, a much closer parallel is attained. Leaving out the vast republic of Brazil, all the score or more of countries which make up South and Central America from Cape Horn to the Rio Grande aggregate some sixty millions as compared with the seventy-two millions of the Indian States. Yet our computation includes such important republics as Argentina with a population rather smaller and Mexico with rather more inhabitants than Hyderabad. The two next greatest American countries, Peru and Colombia, compare in population with Mysore, while Chile ranks between Kashmir and Travancore. Venezuela and Bolivia, each some fifteen or more times as large as Gwalior, cannot muster the latter's three and a quarter millions of inhabitants. Guatemala counts fewer souls than Baroda, whilst the compact little republic of Salvador and the wide expanses of Uruguay contain hardly more people within their borders than the million and a half that live on the six thousand square miles of Patiala State. Honduras, with an area more than six times as great as that of Bhopal, can boast but few inhabitants more, while the somewhat unruly citizens of Nicaragua would be easily outnumbered by the martial population which owes a proud allegiance to the ruler of Bikaner. Even such a prosperous and thriving



country as Costa Rica has a population below half a million, and would thus have to yield pride of place on the list to the six hundred thousand of Cooch Behar.

COMPARISON OF POPULATIONS.—If we now compare these different populations of the Old and the New World, not as to numbers, but qualitatively, we shall find ourselves reaching conclusions far from derogatory to India. In so far as illiteracy may, at all, be taken as an indication of cultural backwardness, it is probably only the city populations of these American States which can show any definite superiority over those of India. When it comes to the general masses of their populations, especially in Central America, northern South America and the smaller States of the South generally, there are few signs of any advance upon the Indian averages. But literacy as such is a scanty indicator of civilization, and whatever the exact percentages of those who can read and write, there is not even a remote counterpart in the new lands across the Atlantic of that moral, mental and artistic inheritance which stirs as an active, living force within the peoples of India. It is not only the past achievements of the Indian peninsula which have no peer in the ancient civilizations of the Americas, even the standard of the present day, whether we compare the broad masses of the people or the *élite* on both sides, is such in India as easily to sustain the comparison, and this whether one chooses to examine the various peoples with the narrow outlook which values human beings merely as tools for economic development or whether one rises to the higher levels which open out expanding panoramas of increasing cultural advancement. If the populations of the New World, assisted and guided by practical sense and technical skill imported from Europe, have been able to expand their undeveloped lands into prospering countries, there is nothing in the human material of India to prevent the Indian States from doing at least as well. The signal success already achieved in the more advanced of these States is there to prove the contention, and now that the process has once



been started, the pace set, even by the most progressive Indian States of this day, is bound steadily to increase.

The existence in India of an indigenous cultural and technical *élite* capable of great and rapid expansion, once the outlet for such talent is provided, is a further guarantee that it is not the absence of adequate leaders which will stop progress. That for some time to come assistance from the more experienced countries of Europe will remain an essential ingredient in the process of economic development of the Indian States cannot be gainsaid. But just as in South America this has not militated against, but on the contrary assisted in, the advancement of a truly national unfolding, so, wisely offered and wisely utilized, European assistance in economic enterprise can be of material aid in India, without hampering the due fulfilment of its national aspirations.

That the stimulus towards such progressive advancement will not be lacking is ensured by the fact that India has at all times shown itself prolific in raising among its rulers men with visions wide enough to embrace vast schemes, endued with the will-power to carry these to fruition. How could it be otherwise? Is there any part of the world so stimulating to vast conceptions? Any part where the glories of the distant past have such persistent links with the greatness of the present? Any part where the vastness of the lands, the numbers of the population, offer greater scope? Greatness of achievement has been the current coin in the realm of Indian history. Its hereditary rulers are born with the instinct, reared in the tradition of achievement. If it is the philosophy of India to appraise the fleeting present merely as the ephemeral vision of a mighty past surging into a limitless future, to see it as a spray of froth on the passing crest of a passing wave in the irresistible and endless stream of time—it is the proud and burdensome consciousness of its Princes to realize that mere mortal man, provided he be great and wise and go not against nature, may dam the flow of events, guide its currents and harness its forces—*ad*

*majorem Dei gloriam* and for the benefit of the peoples whom it is their privilege to rule as it is their duty to protect them.

CASTE AND TRADITION.—But what can it avail a man to conceive vast plans, unless he can summon to his aid those who are wise in council or skilled in execution? It is this *élite* of cultivated and trained minds, it is these "brain-workers," who form the most vital link between the conception of a great idea and its translation into an accomplished fact. Such *élites* are not improvised; they have to be raised. Their ancestors have to be selected and trained before their descendants can hope to be perfected. We believe in the system and apply it to horses, to cattle, to dogs. When it comes to human beings, our democratic respect for the incompetent bids us discard it. Not so in India, where the caste system and a wholesome faith in tradition have combined to discipline the mind and perfect skill. Shortsightedness alone could prevent one from noticing the rank weeds that have invaded the neatly terraced gardens devised by the method of castes for the restricting and thereby strengthening of man's character. Complete blindness would be needed to ignore the poisonous plants that have crept into them. But prejudice alone could fail to appraise at their fair value the great and lasting advantages which the caste system has conferred upon the peoples of India in building up an *élite* fitted for the highest achievement, be it in the realm of action, of thought or of skill. It is from the cultivated and trained classes that the Indian rulers will draw the men who will collaborate with them in the execution of their schemes.

In these classes, too, will be found the safeguards against innovations too radical, too unrelated to the past, to be capable of fruitful development. For all these classes are imbued with a wholesome respect for the traditions of the past. There are those so blindly enamoured of present-day Western civilization that they fail to appreciate, even if they know anything of, other forms of civilization. These will abhor any reference to historical precedent if it clogs in

any way the movement of what to them is the only form of progress. Others, less wilfully blind, will realize that lasting progress is like a tree: the harder the timber the slower the growth. Nor do trees thrive in uncongenial soil, or wax unrelated to their surroundings.

The European enthusiast, eager to confer overnight the full blessings of industrialized Westernism upon what he may imagine to be an expectantly waiting East, will find all the forces of caste and tradition arrayed against him, and will meet in the educated classes of India his most resisting opponents. The wise ruler, conscious of the character and traditions of his people and his country, yet alive to the good which may be gleaned from Western methods and Western conceptions, will find in them the most suitable material for the lasting improvement of his country by way of the rational development of its potentialities.

If we sum up our survey of the human element within the Indian States, we find the spectacle of a traditionally established, consciously accepted, orderly hierarchy, ranging from the ruler through the upper classes down to the masses, bearing within itself the habit and capacity of initiating constructive ideas, the experience and skill to execute these, and the necessary supply of manual labour. We find also, by the side of a natural aptitude to adopt and follow foreign models and to borrow from alien civilizations, a strong sense of historical tradition which tends to rule out and eliminate such innovations as would not prove congenial to their natural surroundings. It is a proud record, rare in any country, rarer still in the republics of the New World with which our comparisons have been concerned. It is an important factor in the future prospect of Indian development.

GOOD GOVERNMENT.—Next to an intelligent, orderly population, good government is an essential towards development, whether economic or otherwise. It is the tendency of modern judgment to identify good government with popular government, to establish a causal relation between it and a wider franchise. The factors which make for

political stability are frequently ignored. Too often undue competition for political leadership has proved a stumbling-block. One of the principal causes which has retarded, and still retards, the economic progress of many of the Latin American republics is the lack of stability through orderly succession at the apex of the administrative pyramid. For it is not so much from actual changes in the personnel or form of governments that peoples and countries suffer, but from the resulting changes in administration and the application of law and order. To steady economic progress there is no greater bar. The Latin Americas have proved this over and over again. Their periods of greatest progression have usually coincided with the complete ascendancy of a powerful personality whose strong hand, wide vision, and fundamental love for his country enabled him—while his power lasted—to overrule factious cliques and to labour for the advancement of the country as a whole. But, strengthened by the constitutional right of Tom, Dick, and Harry to a spell in the presidential chair, personal opposition has sooner or later unseated these useful men and plunged their countries back into the turmoil of the petty squabbles between the “ins” and the “outs.” No impartial student of the history of Latin America—and of many another country as well—can fail to admit that the premature introduction of democratic constitutions into unprepared countries not only fails to establish actual government by the people, but in addition strangles or hampers true progress towards it while retarding economic improvement.

The Indian States have been fortunate in the enjoyment of stable relations between rulers and ruled. Whatever the exact relations may have been at various times and in different States, on the whole they have been established on the basis of mutually accepted historical traditions. However they may appear to an onlooker from the outside, to those concerned they are natural and normal. Nor have the Princes been slow in moving with the times, so far as

this movement had at all penetrated into the consciousness of their particular people and thus rendered it sensitive to, and capable of, collaborating in such changes. But neither the Indian Princes nor their advisers have suffered from the mental delusion that social salvation lies only in granting a vote to the greatest number of incompetents and accepting the verdict of the majority as true wisdom. India still believes that competence is a matter of training.

On the strength of these general considerations some thirty or so of the forty principal Indian States have established some form of legislative councils, spreading down deeper into the people according to the possibilities provided by the degree of development of the people, and in certain cases going as far as to include women in the system. That these councils are invariably of a consultative nature does not detract from their value. On the contrary. In so far as they show themselves capable of constructive thought and fruitful initiation, their advice is unlikely to be disregarded.

Perhaps the main advantage of these councils is, however, that they enable measures initiated from above to be discussed with, and explained to, those in closer touch with the masses of the people. Thus not only is scope for timely criticism afforded, but understanding of general plans and ideas is fostered between the people and those who administer government. From this not only is greater contentedness the inevitable outcome, but increasing numbers of people are gradually educated up to a measure of understanding of the general problems facing the State as a whole, which will enable them to take a more fruitful part in the affairs of the State, and gradually prepare for a true form of government by collaboration between dynasties and peoples. What more successful form of democracy could well be evolved than that towards which the most enlightened States in India are already so effectively building? What process more fruitful for peaceful economic unfoldment?



ADMINISTRATION AND JUDICIARY.—To the people as a whole it is less the theoretical form of the government which matters. It is the practice of administration and justice which affects their daily lives. In this respect it is not possible to generalize about the five or six hundred Indian States which range from the size of great kingdoms to that of little estates. Taking the major States, we have the authority of the Simon Report for the assertion that forty have established High Courts, more or less based on the European model, and that in some thirty or more executive and judicial functions have been separated. Those who have had experience of recourse to justice in some of the most advanced countries of, say, Western Europe will have had occasion to wonder why there should be such differences in the speed with which decisions are reached; why in one country there should always be a long list of cases in arrear, whilst in others the case-list was kept up to date. It need not, then, surprise us to find similar differences between the Indian States. Nor is it likely that equal competence is to be found everywhere among the judges. In a general way, however, it may be said that the administration of justice in these States proceeds smoothly and adequately. For the training of judges there is ample scope in the Universities of India, whilst the current practice of British India, in which Indian and English judges have long functioned side by side, has maintained a high standard. The law according to which justice is administered is, of necessity, based upon the historic law which traditionally has regulated within each State the relation between subjects and ruler and between the subjects *inter se*. Upon this body of well understood and mutually accepted law has been grafted in varying ways and to different extents such special laws as were from time to time necessitated by the progress of modern conditions. In particular have there been substantial additions affecting economic relations, such as laws and regulations



expanding the possibilities of commercial transactions, enabling the formation of joint stock companies, co-ordinating the relations in regard to mining and other concessions, and various other matters affecting trade and trade relations as well as social life generally. The position of joint stock companies has hitherto been provided for in only six States—namely, Hyderabad, Mysore, Travancore, Baroda, Gwalior and Indore. It is, however, apparent that the success which has followed this innovation, and which has resulted in the registration in these few States of some four hundred and forty-five companies with an aggregate paid-up capital of over seven and a half millions sterling, is being studied, and is likely to be followed in other States which have already started a definite programme towards economic development. In a general way these various enactments follow the system in vogue in British India, sometimes with improvements due to observation of the shortcomings of the models or to the special conditions of the country concerned.

In regard to trade or industrial enterprise it is not necessary to operate through a company registered within the State. In addition to the above-mentioned concerns so registered, there are in operation, in the few States mentioned, close upon forty companies which are registered elsewhere than in those States, the paid-up capital of which exceeds thirteen millions sterling. Similarly companies registered in British India or elsewhere can, and many do, operate in the Indian States. Nor are such concerns limited to any particular types of business. They include banking and insurance companies, rail- and tramways, as well as other forms of transportation, planting and mining concerns of all kinds, and a variety of textile and other industrial undertakings. Public utility and other enterprises owned by the States have not hitherto been organized in the form of private or public companies. The purchase of the railways of Hyderabad by the Nizam's government may prove a move in this direction. There are also other indications that certain of the governments

of the States are looking askance at haphazard development of their resources, and are preparing for a co-ordinated endeavour in this direction, under governmental guidance and with governmental initiative. In that connection they may come to see the advantages of operating through limited companies in some such manner as has proved so successful to various State, provincial and municipal authorities in Southern Germany and elsewhere. If these indications were to materialize, it is to be expected that the position of joint stock companies will be the subject of legislation in other Indian States than those few mentioned above, and that their position in general will be more fully provided for.

In regard to the administration of these States it is again impossible to generalize. In the most advanced States, not only has the independence of the judges been assured by their irremovability and the provision of a pension, but civil servants are protected against arbitrary dismissal by various provisions. Elsewhere the ancient tradition of paternal, but not necessarily arbitrary, intervention of the ruler has been maintained to a greater extent. In a general way, however, it is not unduly optimistic to say of the principal States, that the enlightened views of their rulers, stimulated and aided by the constructive example set by British India, have resulted in the establishment of orderly administrations, the personnel and methods of which are reasonably adequate to fulfil the tasks imposed upon them. The business man who prepares a substantial undertaking in any of the Indian States will, naturally, fully investigate the exact conditions in that State. In the principal States he will, in one way or another, find adequate protection for his interests in operations within such a State. When it comes to transactions with the governments, the position is a little more delicate. It is to be borne in mind that, so far as their internal affairs are concerned, the rulers of the Indian States are independent sovereigns possessing full sovereign rights. In all countries process against the

sovereign authority of the country through the ordinary courts of law has proved fraught with difficulties and technicalities. A long experience of these complications in many parts of the world has enabled various devices to be evolved whereby the privileges of governments and the reasonable rights of men of affairs have been safeguarded to mutual satisfaction. There is no reason to assume that similarly satisfactory arrangements cannot be made in the Indian States. We may now conclude this rapid comparison between the Indian States and the South American republics by saying that in all such matters as area, numbers and quality of the populations, stability of government and adequacy of administration and justice, the former compare far from unfavourably with the latter. If Britain has seen fit to invest vast amounts of capital in the industries of the American republics, reaping on the whole a steady direct benefit in addition to the indirect advantage of having created a growing market for her exports, she may well consider whether similar and greater opportunities do not await British enterprise in the Indian States.

EXPANSION OF INDIAN IMPORTS.—At this point the British trader, industrialist, or financier may well ask: "Admitted that there are all these vast areas, these teeming populations with their stable and orderly governments, how does this affect us? What is the value of our trade with them? Why is it no greater? How can we improve it? And what, in general, are the prospects of development which lie before these countries? Let us deal first with those industrialists or traders whose interests lie in selling their goods in the markets which the Indian States provide. Statistics of imports into some of the States are available, but not of all. We have, therefore, to derive our estimates from the aggregate imports into the whole of India. For this purpose we must limit the survey to seaborne imports of private merchandise.

The total of such imports into India for the financial year 1927-1928 aggregated 187½ millions sterling, of which

not quite 90 millions originated in the United Kingdom. Taking into account that British India includes the principal cities of the peninsula as well as the bulk of the European population with its higher standard of living and production and its consequent higher consumption, it has been estimated that the consumption per head of the population in the Indian States is about two-thirds of that in British India, though it may be added that in some of the richer States, one of which is Baroda, consumption is even higher than in British India. As the aggregate population of the States is around one-fourth of the total, it is accepted by competent authorities that about one-sixth of the total imports of India find their ultimate destination in the Indian States.

On this basis the seaborne imports of private merchandise into the Indian States from all countries would amount to about  $31\frac{1}{4}$  millions sterling, and those from the United Kingdom to some 15 millions. The latter figure is far from negligible, but it compares unpleasantly with the total from all countries, in that it represents less than 48 per cent. of that total. Is there any inherent need for this unfavourable proportion? In the middle fifties of last century Britain's share in Indian imports was over three-fourths of the total. During the last pre-war lustrum it still averaged 63 per cent., and even in the war years 1914-1919 fell no lower than 56 per cent. Since then, however, it has steadily declined, until the last available statistics show it at 47·7 per cent. It is not within the scope of this paper to consider the ways in which British exporters to the Indian States may regain a more befitting rank among their competitors from other countries. Some of their handicaps lie deeply rooted in the political and industrial conditions at home. Other remedies they control themselves and can apply, if they choose: closer compliance with the requirements, even the fads, of customers; keener representation on the spot; more appropriate organization of consumers' credit; knowledge

of the customers' language and closer personal intercourse—all these and several others depend upon the trader. They have been advocated by all those who have these problems at heart. There is no need to repeat them here. What may bear restatement is the advantage which British traders have at the outset in the Indian States. Of anti-British bias there is no trace. On the contrary, not only the rulers, but the governing and upper classes generally, are keenly alive to the political value of the British connection. They fully realize that the fostering of close economic ties can only strengthen the political links. As for the masses of the population, these experience no direct political intervention by Britain at all, since the internal affairs of the States lie outside British rule. Hence there is no incentive for the intrusion, from political motives, of any anti-British policy in the realm of trade and commerce. In fact, by the highest as by the lowest in the Indian States the British trader's success will be welcomed as a sign of the country's prosperity. It depends on the British traders themselves to nurse their advantages and promote their chances. In personal contact, in mutual appreciation and understanding, lies the beginning of all success in intercourse between peoples and individuals.

A different matter with a direct bearing upon our subject is the question: How can the aggregate purchases by these peoples be increased, so that Britain may have an opportunity to increase her share absolutely as well as relatively? There is only one answer: Increase their buying power and raise their standard of living. When it comes to this, one finds that in all the principal States, in different manners and to varying degrees, both rulers and ministers have long been devoting close attention to the methods by which their populations could be stimulated to, and assisted in, raising their standard of living by improving their powers of production. It is in this sphere that British interests, eager to develop these purchasing markets, have a direct incentive to collaborate, as best they can, in raising the



productive capabilities of these States. One should never forget that, except temporarily by the expedient of drawing upon capitalized savings, no man and no country can buy more than it sells. Buying power equals selling power. It is a simple and irrefutable economic maxim. If the Indian States are to buy more, they must sell more. If we wish them to buy more from *us*, *we* should help them to sell more.

The slogan "Buy from those who buy from us" won't carry us very far in this case, for England has never been able to absorb a preponderating share of India's exports, as it has been able to supply the major part of India's imports. Except during the abnormal war years Britain's proportion of the total exports from India never greatly exceeded one-quarter. During the exhaustion of the post-war period it fell to 21 per cent. It now stands at 22 per cent., without any great prospect of further increase. America, on the other hand, has increased her share in direct imports from the pre-war average of 8 per cent. to the present figure of 11 per cent., with every expectation of forging ahead still further. Germany, after dropping out altogether during the war and for a while after, is back again at her pre-war average of 10 per cent. The British Empire (other than the United Kingdom) has also regained its previous level of some 16 per cent., whilst "all other countries" supply almost 40 per cent. of the demand for Indian exports. By increased buying Britain will be able to strengthen her ties with the Indian States and to some extent to improve the buying power of their peoples. It is, however, unlikely that by this means alone any serious progress in raising the standard of living can be achieved. In the development of more important buying markets than Britain lies greater hope; in the stimulation of greater production, especially for domestic consumption, more immediate promise.

INCREASE OF INDIAN PRODUCTION.—If we desire to form an idea of the way in which British enterprise may collaborate in this process, we may usefully consider the course of British commercial relations with the Latin



Americas. We shall then find how large a proportion of British exports to Central and South America is directly due to the fact that British capital and British technique have unstintedly gone into the development of the natural resources of those countries. Similarly we shall find that corresponding enterprise by the United States of America in the Central and Southern parts of the New World have led to similar advantages for that country. After all, what more natural than that a South American railway, promoted by British capital, staffed with British personnel, should purchase its rails, its rolling stock, all the hundred and one items for its due equipment—all things being equal—in Britain? How would one expect another railway, owing its origin to American initiative, not to look first towards the United States for its supplies? Mining companies, of which so many have been started and carried to success, likewise tend to purchase their plant at home; forest development by British enterprise may also be expected to increase the flow of orders into Britain. The list may be expanded at will. But, in addition to giving rise to these direct orders, all this enterprise has needs disseminated a steady stream of wages and salaries to the overseas populations. Thereby it has increased their buying power and raised their consumption. In supplying these general needs, the British exporter should have an advantage over his competitors in all regions developed with British co-operation, by reason of that general influence which close intercourse in productive development cannot fail to create between countries jointly engaged in it.

But we need not go so far afield to find proofs that participation in promoting another country's economic unfoldment leads to much indirect, in addition to direct, benefit. British India provides ample testimony. It is obvious that large schemes of railway construction, harbour development, irrigation and hydro-electric enterprises or the building of bridges, initiated by British authorities, are bound to benefit the British engineering industries. But

the expansion of private industries may do so too, and will increasingly tend to do so in proportion as there are within those industries ties with British capital or skill. It is considerations of this order which caused H.M. Senior Trade Commissioner for India, in dealing with the improvement in Indian industries which he anticipates, to state: "Apart from the requirements of Government, however, the steady progress which is being made throughout the country in the application of power to small industries, agricultural operations and lighting is certain to result in an increasing demand for boilers, prime movers and electric plant. The imports of textile machinery are also likely to reflect the prosperity of the jute industry and the recovery and modernization of the cotton mills. Mining and oil-well engineering provide an improving market for plant of all kinds, while the demand for specialities such as sewing and knitting machines, typewriters, etc., grows apace. After the period of depression through which, with a few exceptions, Indian industries have passed during the past few years, there are now unmistakable signs of recovery. This should stimulate the demand for the innumerable miscellaneous items of equipment, plant and stores which—in the aggregate—amount to a very large sum and constitute a valuable British trade."

Here, if it be needed, we find authoritative testimony of the great benefit which the expansion of industrial and other enterprise in India can confer upon British industries. It is, then, no exaggeration to assert that the most effective way to raise the aggregate of imports by the Indian States lies in stimulating their productive capacities to the end that they may increase their exports, and thereby their capacity to pay for imports. Nor is it unreasonable to affirm that in measure as British capital, skill, and experience participate in such development, to that extent does British industry stand to benefit, both directly and indirectly. Let us now consider some few of the many directions in which such efforts might suitably be guided.

MODERNIZATION OF AGRICULTURE.—To talk of “modernizing agriculture” in India must cause an irritated shudder to pass through many of those who are familiar with the primitive, often archaic, methods of agriculture which are normal in India, who think of the inherent conservatism of farmers the world over, let alone in the East, and who have had experience of the utter poverty of the majority of the agricultural population. Yet we have just seen that even the natural caution inherent in a governmental Trade Commissioner does not prevent a reference—in the present tense—to this fact. After all, there are many ways in which modern influences have made themselves felt in the realm of agriculture in recent years. Take irrigation. Is it to be assumed that no more remains to be done in this respect in any State? The reverse is the case. In the past several States have carried out irrigation schemes, either in conjunction with adjoining works in British territory or independently thereof. There are still many plans under consideration. Others may remain to be initiated. Here, then, is one field for immediate co-operation by British interests. Next consider farming equipment, electrical and other. Admittedly the small farmer has neither the desire nor the means to acquire even the cheapest modern tools, let alone mechanical equipment. Labour-saving to him has no meaning, and capital-saving has never been within his reach. But there are also many great landlords and large-scale farmers. Where these can be induced to go in for modernization the means can be found. Then, again, the many existing co-operative societies may be increasingly the method to promote co-operative modernization. This has been done most successfully in Bulgaria; why need it fail in the Indian States? The Bulgarian farmer was relatively no richer than his Indian counterpart; he is certainly no less conservative nor less wedded to the traditions of the past. But even farmers yield to evidence—the evidence of successful attainment over a reasonable period of years. If those interested in

developing this side of agriculture with a view to building up a growing demand for agricultural machinery and equipment of all kinds were seriously to collaborate with the governments of those States which are best suited to this kind of development, surprising success could be achieved, and the example would undoubtedly have stimulating effects elsewhere.

Take the other branch of agriculture, what may be termed industrial agriculture. It may be that, in so far as the raising of such crops as tea, coffee, or rubber is under European management, the equipment used is as up-to-date as conditions permit, though even this is by no means certain. But can it be doubted that among the many indigenous enterprises of this kind, several of which are not on a vast scale, there must be room for improved equipment? What would be the effect upon demand in this quarter if greater or more convenient credit facilities were afforded, either in the form of capital participation or of extended purchase credits, based upon close knowledge of local conditions?

**SUGAR INDUSTRY.**—Certain it is of, at any rate, one very important agricultural industry that it is most inadequately organized and greatly under-developed—namely, the Indian sugar industry. The consumption of sugar by the largely vegetarian population of India is enormous. It is not, therefore, any lack of a steady demand which can be said to discourage adequate production. Nor is there any climatic or meteorological obstacle. India was probably the original home of the sugar-cane, and its acreage under sugar is still by far the largest in the world. The total annual production of *gñr* (unrefined sugar), including palm sugar, is around the two and a half million tons. But even this vast Indian production falls short by between one-half and one million tons of the annual consumption. That shortage is filled by importation from abroad, notwithstanding the fact that foreign sugar is subject to an import duty of 25 per cent. In recent years this market has been

practically monopolized by Java, which, during 1927-28, supplied sugar and molasses to India for a value of some ten and a quarter millions out of eleven and a quarter millions of total imports.

Now there is nothing in either the climate or the weather conditions, nor in the quantity or quality of labour, which need necessarily place India at a disadvantage compared to Java. But there is a great deal in the painstaking, persistent and highly scientific research which the Dutch planters, efficiently organized for this purpose, have devoted to every aspect of their industry, whether it be the selecting and breeding of the hardiest and most productive varieties of cane; the supply of healthy seedlings reared in special climates; the tracing, prevention and cure of disease; the scientific treatment of the soil; stimulation of the most effective methods of planting by the local populations; the problems of irrigation and drainage and all the various mechanical and other problems of the industry. As a result, both the production of cane per acre and the yield of sugar per unit of cane have steadily risen from decade to decade, and have left India's record behind in the most deplorable manner. There is no reason why India should not export sugar. There is no excuse for her to import any. Here is a profitable industry that only awaits co-ordinated and persistent effort to enjoy great expansion.

With the spadework so competently performed by the Dutch, and their scientific achievements at the disposal of whoever takes the trouble to investigate their various research stations and establishments, the Indian sugar industry has but itself to blame if it persists in its present inferiority. What a stimulus to prosperity would not be entailed by the replacement of these vast supplies of Java sugar by indigenous produce! In 1927-28 some 823,000 tons of sugar were imported, the bulk being refined sugar. Suppose the Indian sugar industry were able to supply less than half of this, say some 400,000 tons of refined sugar—and there is no reason why it should not produce the whole.



According to the particulars for 1922-23 (the latest on this matter which the writer can secure at the time of writing), out of the many hundreds of sugar factories in India some thirty-one are stated to be refineries of large size and modern equipment. Their output of refined sugar, however, was only 77,600 tons. How many of these factories would have to be enlarged, how many new ones to be added, if India decided herself to raise and refine those 400,000 tons, which are less than half of what she now imports?

Perhaps some enlightened Indian Prince whose State offers a promising field for the attempt will surround himself with the advice and skill necessary to take the initiative towards the modernizing of this industry until it can fairly stand a comparison with Java standards? Both agriculturally and industrially his country would derive substantial benefit. What profit would accrue to British industry in the way of supplying machinery and equipment it is hard to say—much would depend on whether such a venture were promoted and supported with British capital and enterprise—or whether these, too, were left to the Dutch!

These are but a few hints of some of the ways in which Indian agricultural modernization may be brought within the realm of practical and immediate possibilities. It is for British financial and industrial interests to decide whether they care to participate in the endeavour and share in the reaping of the inevitable harvest.

**HYDRO-ELECTRIC ENTERPRISE.**—General improvement of the industries of the land will spread new wealth through enhanced wages and the rise in values of foodstuffs for consumption by an increasingly industrialized population among wider and wider layers of the people. Village communities will tend to raise their standards of living in correspondence with their enhanced purchasing power. Not only will general consumption gradually increase, but new possibilities for further enterprise will open up. Thus the establishment of one or more sugar factories in a certain area might furnish the basis upon which to establish a new



hydro-electric undertaking, the current supplied by which would then become available also for various other public and domestic objects. We need not go outside India or the Indian States to find examples of similar development. The history of the hydro-electric installation on the Cauvery River at Sivasmudram in Mysore State, due to the initiative of a far-seeing Dewan, furnishes an apt illustration. Originally designed to generate 10,000 h.p., mainly with a view to supplying the goldfields at Kolar, it could gradually be expanded to provide 46,000 h.p. without yet satisfying the demand for power which came to grow up. Hence plans for the utilization of other sources of water power are under consideration by the Mysore Government. This single example must suffice. It should induce those interested in the supply of electrical equipment and machinery to study the possibilities in this direction which are available in the Indian States. It will not be many years before some of the several plans for hydro-electric developments now under consideration by various governments will materialize. British interests should make sure that they participate in these fruitful undertakings.

**TIMBER AND WOOD PRODUCTS.**—The wealth of its forests has received great attention in British India. In some of the Indian States, too, it has been the subject of considerable thought and intelligent measures for preservation and utilization with gratifying results. On the whole, however, the immense forest wealth of the Indian States has barely been tapped. The exploitation of *sandalwood*, both for its wood, so rightly prized for the making of boxes and furniture, and for its valuable essential oil, has been intensively and efficiently developed in those parts of Southern India which are the home of this tree, such as the States of Mysore, Travancore, Coorg, and Sandúr, and certain districts in the Madras Presidency. Especially in Mysore, where (as in Coorg) all the trees are State property, and in Travancore, have the sandalwood and sandalwood oil industries enjoyed prosperity. This is due as much to

the scientific attention bestowed upon the processes of production as to efficient marketing, which has brought these countries in direct contact with active markets both in America and on the Continent of Europe.

When it comes to *hardwoods* the position is less satisfactory. As soon as one leaves out of consideration the exports of teak from Burma, it is seen that there is hardly any export of timber from India proper. In fact, through Bombay and Calcutta not only is there a regular importation of eng (*Dipterocarpus tuberculatus*) and pyinkado (*Xylia dolabriformis*) from Burma, but particularly of teak from Siam and Java. The beautiful padauk (*Pterocarpus macrocarpus*) from the Andamans is undoubtedly becoming increasingly appreciated in England, but those who have seen the several magnificent specimens of Indian timbers suitable for interior decoration and furniture displayed at Wembley, or who have had an opportunity to look around at India House, may well wonder why this branch of Indian trade has been so scantily developed. The answer will mainly be found in lack of cheap transport. As soon as means of communication to the remoter parts of the Indian States can be established upon an economic basis—and the opening up of mining industries may hasten forward the opportunity—the attention which many of the States have devoted to, and are increasingly concentrating upon, their forest reserves may find its reward. Meanwhile it may well repay British interests to devote close attention to the investigation of the greater use which may be made of Indian timber, and thereby establish themselves in good time in a trade which is bound to become important, since the world supplies of valuable timber are by no means inexhaustible and in many parts show signs of depletion.

PAPER INDUSTRY.—Perhaps even more immediate advantage may be reaped from the exploitation of coniferous and other woods suitable for the paper-making industry. The annual consumption of paper and pasteboard in India is around  $3\frac{1}{2}$  millions sterling. The gradual increase in

literacy among its 320 million people and the many other growing uses which modern life creates for these articles are bound steadily to raise the demand. At present these requirements are mainly satisfied out of imports, both of the ready-made article and of paper-making materials. According to the statistics for 1927-28 there were then in British India eight paper-mills, which, in that year, produced 33,698 tons, valued at £1,230,000. Of the Indian States, only Travancore was indicated as possessing one such mill, and its output was said to be but 245 tons with a value of £6,000. These mills, in addition to indigenous produce, used imported materials to the extent of 20,000 tons, valued, even at the low prices of that year, at some £300,000. In addition to this, India imported over 100,000 tons of paper and pasteboard representing a value of  $2\frac{1}{4}$  millions sterling. It need not, then, surprise us that in some of those States which combine the possession of pine or other suitable forests with that of ample water-power, serious attention is being given to the means of utilizing these resources. British interest lies in supporting this development. It must not be overlooked that Britain's share in the overseas supply of paper-making materials to India is nil, and its proportion in regard to paper and pasteboard declining. From 56 per cent. of the total imports of such goods in the last pre-war year, Britain's share has steadily gone down to  $35\frac{1}{2}$  per cent. in 1927-28. Against this the Scandinavian countries doubled their proportions. Holland trebled its share. The United States of America increased theirs sixfold, while Germany with 16 per cent. almost recovered its pre-war position. Since, then, production in Britain is evidently becoming too burdensome for British manufacturers successfully to compete with more favoured, or politically less harassed, countries, they may well consider whether it would not pay them better to establish branches of their industries in India. They would there have a vast and expanding market within the tariff boundaries of the country of production, a consideration which

may, at some future time, play even a greater part than now. They would benefit by lower overhead taxation and lower scales of wages. They would save sea freight and harbour charges on the bulky materials and the scarcely less bulky finished products. It is by no means certain that they would not end by securing greater profits than they can possibly derive from their dwindling export trade to India. It is at any rate sure that the promotion of such a scheme would receive warm support from the Indian States concerned.

MINING AND INDUSTRIAL DEVELOPMENT.—Important as the outlets for fresh enterprise may be which have been very incompletely indicated above, it is probably in the realm of mining and its derived industries that the speediest changes will be witnessed. Here we may pause and ask ourselves what inducement there can be to increase the production of raw materials at a time when world prices of almost all of them are down to, if not below, the cost of their production. To assume that such a state of affairs can last for ever, would be to accept that the world's population had reached the point of absolute saturation in consumption. Nothing could be more unwarranted. The temporary disturbance of such populous areas as China and Russia is bound to be a serious factor. The impoverishment of the European countries after a disastrous war of the first magnitude must add to the trouble. The modern processes of unduly rapid production may accentuate the difficulties from the other end. But is there any reason to believe that the present requirements *per capita* of the world's population represent the limit of either their desires or their needs? Nor should we be justified in accepting the present consumption in India as having reached its zenith. It is lack of purchasing power, not the saturation of acquisitive desire, which has set a temporary term to consumption. There is world-wide over-production only because the world's consumption is throttled, locally, by causes such as those obtaining in China and Russia, universally, by the

fact that purchasing power has been outstripped both by the offers to sell and the desire to buy. This is a temporary disequilibrium, the root cause of which lies in the disproportion between the standards of living in the highly industrialized countries which are the main factors in world production of finished articles (and thus the main consumers of raw materials) and the remainder of the world whose peoples they require as their customers. If British or American industries can no longer find buyers for their wares among the Indians, the Africans, the Chinese, it is not that the latter would not buy if they could, it is because the prices based upon cost of production have been driven up beyond the reach of the Indian, the African, the Chinese purses, and such by nothing else than the high cost of living in the countries of production. This cost of living includes all such factors as level of wages, of social services, of political incompetence and the consequent burden of taxation on industry as a whole. We are not here concerned with the several cures for these fundamental ills in the countries of intensive production. We are only concerned to point out that the outstripping of consumption by production is merely the result of a lack of equilibrium between standards of living, a lack of balance so acute, that the usual remedies—labour-saving devices and mass production—cannot cure it. The real remedy lies in redressing the balance between the standards of living in the industrially producing and consuming countries by raising the purchasing power of the latter. This can only be achieved by developing their natural resources to the fullest extent, particularly those the finished products of which supply an existing demand in these countries themselves. A process of this kind needs the support of fresh capital being brought into these countries, or hoarded capital within them being mobilized. In either case a steady flow of wages and salaries must follow. Thus gradually the purchasing power, and with it the higher standard of living aimed at, will be secured. At first this process will undoubtedly encroach



still further upon the outlet for certain articles of manufacture which used to be imported. This cannot be helped, and industries will have to adjust themselves to the idea that they no longer possess monopolies. Subsequently, however, the enhanced standard of living will set up a permanent demand for all those goods which the Eastern countries cannot themselves produce, and thus increased international trade will result. Meanwhile, the older industries may, in certain directions, feel the pinch even more acutely. They have but themselves to blame. If British or American labourers and politicians, or Australian farmers, choose to set up arbitrary standards for themselves, unrelated to world conditions, and yet expect the rest of the world to go on buying from them at their prices, disappointment is bound to result. It is not within the purview of this article to enlarge upon this subject, or to pity industries which, having deliberately worked up an indigestion, must now bant. All we are concerned to show is that there is no such thing as permanent world over-production, though it may well be that in certain countries certain industries are no longer profitable, since the prices required to cover their cost of production can no longer be paid.

To return to India, both from the point of view of that country and with an eye to world prosperity in general, every expansion in its productive capacities, especially where these are based upon its own raw materials and aim at the satisfaction of its own needs, is to be welcomed and encouraged. Only by such progress can its general purchasing power be raised, and with it its ultimate demand for the products of other countries. In so far as raw materials are available or within reach, the establishment of industries in India, primarily with a view to Indian consumption, will secure many advantages: wages, even if these rise substantially, will still be lower than in most of the industrialized countries; taxation is low, and it may take a long time before any orgy of waste, misleadingly



disguised under the name of social services, will raise the burden on industry to anything like the European levels; distances are great, and the saving of freight correspondingly appreciable. Of the incidence of tariffs it would lead us too far to treat. As it is there already exists a discriminatory tariff, with an average of 15 per cent. and higher duties (up to 30 per cent.). That "safeguarding" or other forms of protection may effectively stimulate industries no one can deny. That even sky-scraping tariffs do not infallibly afford relief America has proved. But that in an increasingly protectionist world an area including three hundred and twenty million people will for ever be content to drift at the will of others may be doubted. What is more, if there be virtue, as many believe, in some greater economic cohesion between the component parts of the Empire, the charity which will confer that benefit upon the Empire is sure to start nearer home. For all these reasons, both universal and special, the stimulation of industrial development in India, based on its natural advantages, is as sure to be profitable as it is in the long run bound to be inevitable.

British industrialists would therefore be well advised to take the long view. It may be easier and more attractive to produce at home for export to a quiescent Indian market. But it cannot be denied that internal production in India will increasingly narrow that market in respect of certain goods. It may then well be wise in good time to take a hand in the progress of Indian production. The manufacturing of Ford cars in the several countries of Europe is not only benefiting those countries, it is also making up to Mr. Ford for the loss of sales in those countries he would otherwise be sure to experience. There are compensations in forestalling the inevitable.

COAL AND IRON.—It has been said that we live in the age of iron, and certainly this metal, in the various forms which we make it assume as steel, is the basis of our material civilization. The East as a whole still largely enjoys the leisure of a "vegetable civilization," a term

justified by the preponderance among the articles it uses of products of vegetable origin, caused, *inter alia*, by the extensive use of timber and bamboo where we use steel, of palm-leaf and thatch where we employ corrugated iron, and in many other such ways. Nevertheless, the use of steel and iron throughout the East, and markedly in India, has been steadily increasing. This is but natural, for the products of European and American manufacture, in which iron so largely enters, are far from being despised even by those philosophers who may regret the noisy invasion by a form of civilization of which they do not altogether, or even altogether not, approve. After all, your extreme nationalist may glibly talk of using home-made articles, but he does not prefer the bullock-cart to the train whenever he can afford to use the latter. Even Mr. Gandhi may reduce his garments to homespun, but he cannot in all respects escape using the products of industrialism. And it has been said of a Chinese Tuchun, prominent in recent events, that he preferred the philosophy of his own country and the machine-guns of the West. It is neither prejudice nor lack of appreciation, but the limitation of purchasing power, which restricts the use in the East of those products of the West into which iron and steel enter in such a preponderating proportion.

From the ancient past iron ore has been smelted and turned into simple implements in all parts of India, but, until the last few years, the country has been entirely dependent upon overseas imports for its supply of steel and iron in all the complicated forms necessitated by modern requirements. During these last few years, mainly as a result of the erection of the Tata Iron and Steel Works, Indian production has supplied an increasing part of these requirements. In 1927-28 the Tata Works output of finished steel reached the previously unattained figure of 363,195 tons. Nevertheless imports of steel and iron still aggregated 1.2 million tons, with a value exceeding sixteen millions sterling. Nor is this considered the limit of India's

needs. H.M. Senior Trade Commissioner for India in his Report for 1927-28, after pointing out the increased importation in the year under review compared with that preceding, goes on to assert that "In the opinion of those competent to judge this extension, the demand for steel of all kinds will absorb not only the rapidly increasing production of the Tata Steel Works, but will also result in a steadily increasing demand for imported steel." It is, therefore, no rash assertion to say that if India can produce more raw iron and steel from her natural resources, there can increasingly be based upon this those ultimate industries which will find within the borders of India itself an adequate and expanding outlet for their products.

The presence of iron ore alone, even if it be of the richness required to compete with present-day big production—that is to say, not much below 60 per cent. metallic content—will of itself not solve the problem. Adequate supplies of coal suitable for metallurgical purposes are equally essential. Modern experience shows that, for obvious reasons, the tendency, where iron ore and coal are not found together, is for the ore to move towards the coal and not *vice versa*. In fact, American writers dealing with the iron ore supplies in the Philippines have stressed the fact that if and when such ores are found to be of workable content, the absence of coking coal will prevent the establishment of any substantial iron and steel industry in those islands, but will rather tend towards the export of the ore to such parts of China and Japan where the required coals are available. The problems, therefore, of the iron and coal industries are deeply interwoven.

It would exceed the scope of this rapid study of the future prospects of Indian economics to go further into these problems. The geological survey of tropical countries for minerals, wherever these have no outcrops, is a laborious task, rendered immensely arduous by deep layers of alluvial detritus and the overwhelming vegetation. Moreover,

surface discoveries without the added confirmation of deep borings, especially among disturbed strata, such as frequently occur in India, are apt to be misleading, and that not in one direction only. Thus it is that although geological research, both in British India and several of the Indian States, compares favourably with the achievements in other Eastern countries, there is great uncertainty as to the ultimate reserves of either coal or iron in India or in other parts of the East. In general it is accepted by those who have gone fully into such particulars as are available, that compared to their populations the Far East is distinctly poor in both, and that whatever may be the actual reserves in India, these are comparatively more important than in any of the other Eastern countries, with the possible exception of China. In a general way it is assumed that India, like the other parts of the East, will be unable to raise its industrialization to the pitch attained in Western Europe or Northern America—a prospect which may be far from disturbing to Indian thinkers and responsible statesmen.

But the acceptance of this general proposition by no means nullifies the advantages which India may derive from the existence, both in British India and in certain of the States, of iron ore of adequate content and of coals with satisfactory coking qualities. Once means of communication have been established to bring the two together in a suitable place, the production of raw steel is a mere matter of organization, and the establishment of further industries based upon this is within reach. Nor should the possibilities of hydro-electric developments in the same areas be ignored. In certain Indian States much research into these matters has already been accomplished. As soon as co-operation with experienced industrialists can be established, rapid and sound progress may be expected to the benefit both of these States and the industrialists and financiers. If industrialization in India is to proceed at all, it should commence here, for the iron and coal trades lie at the root of most other industries. India has the possibility

of substantial success in developing both even further than she has already done.

NON-FERROUS METALS AND MINERALS.—Many other metals and minerals enter into the processes of modern industry in varying proportion and bulk. Foremost among these are copper, tin, lead, zinc and certain other metals. In other cases such metals or minerals are used in only small quantities, but owing to comparative scarcity command high prices. Here we may mention manganese, titania, tungsten, vanadium and several more. There is at present no evidence that any of these are to be found in India proper in quantities likely to encourage their production for the world market. Many of them have, however, been located in sufficient quantities to justify extraction for the requirements of domestic industries. The rarer elements are always in demand, whether in India or abroad. But even of the more abundant metals the demand in India regularly exceeds the supply. Of brass and copper in crude form three and a half million sterling's worth is annually imported; the importation of tin approaches the million mark; zinc enters the country to the value of over a quarter of a million, and the demand for overseas lead ranges around one hundred thousand pounds. How much of these metals enters into the composition of imported articles miscellaneously grouped under the headings of hollow ware, hardware, machinery or equipment it is impossible to say. It does not require a wizard to see that for all such of these metals and minerals as the Indian States can produce, either in the raw or a subsequent form, a market is waiting within the peninsula.

BAUXITE.—This ore, which in varying combinations contains the metal aluminium, has in recent years assumed substantial importance in Europe. As the name indicates, the original place of discovery was Baux in France. Notwithstanding this French origin, it was before the war usually exported, mainly to Germany and Italy. The profitable and growing industry of aluminium hollow ware



therefore benefited those countries rather than France, which country in fact imported most of its requirements of the finished article. Since the war this roundabout process has ceased, and a thriving industry in aluminium hollow ware has been built up in France.

In India there has been a regular extension of the hollow ware manufacturing industry, and the use of aluminium by this industry has steadily increased. The raw material has, however, been mainly imported, and the quantities so received by India have correspondingly risen. Compared to the 97,222 cwts. of aluminium in ingots, blocks, bars or circles imported in 1926-27, and valued at £712,500, the following year showed a rise to 134,870 cwts., which, even at the lower prices then ruling, aggregated £885,000. Though competition for the Indian market is keen between the British Aluminium Company and the Northern Aluminium Company of America, there should be scope for an indigenous industry based upon the raw material which, in the form of substantial bauxite deposits of adequate analysis, has been located in certain of the Indian States and which only awaits utilization.

THE NEW OUTLOOK IN INDIAN ECONOMICS.—It is time that we should bring to a close this far too long, yet all too incomplete, vista of the economic prospect which lies before the Indian States and the bearing which it may have upon British interests. Before doing so we must, however, justify in greater detail the assertion with which this article started—namely, that not only politically, but also in economic matters, the Indian States are about to enter a new era. It is well to realize that the various hints here given of a few directions in which great changes are impending in India are not the mere visions of an optimistic mind. The statements made, the developments indicated, are founded upon actual facts ascertained by competent experts on the spot and derived from the conscious aims conceived by responsible Indian rulers, statesmen, and economists. To those not privileged regularly to

peruse the "Annual Administrative Reports" of Indian States, it may come as somewhat of a surprise to receive one labelled: "Seventy-second Annual Report." The sixties of last century hardly strike one as a time when princely rulers in India would concern themselves with the administrative and economic development of their realms sufficiently to warrant the aid of annual reports full of abstruse statistics. If all the States may not, in this respect, be able to equal the record of Travancore, there must be few among the major States which have not, since a longer or shorter period, concentrated the light of deliberate investigation and experiment upon the problem of how to develop their resources and bring greater prosperity to their countries.

In India, as elsewhere, the fierce explosion of the war suddenly blew open many shutters. Decorative cobwebs were ruthlessly disturbed. Uncomfortable draughts searched every corner. The peaceful slumber of many who dozed was brutally brought to an end. The pace of progression—whether one chooses to consider it progress or not—was quickened. Aims undreamed of were suddenly seen to come within reach. The Indian States, both those which had long devoted attention to development and those in which men had remained content with the conditions of their fathers, were roused to an acute realization of their destinies. Their leaders may still be asking themselves many questions, but they know they cannot stop striding forward to a goal which steadily assumes clearer outlines to the far-seeing. Suddenly, in the midst of the many different courses which men may steer in the pursuance of similar ends, a new conception drifted, more or less clearly, within their purview—the realization of the fundamental unity of their joint India.

The diversity of their races, religions, and peoples, the barriers of their differing tongues and varying civilizations, have throughout the ages tended to accentuate the separations between the inhabitants of the vast Indian sub-

continent. It was left to alien conquerors to visualize and, from time to time, more or less completely to achieve a unity of overlordship and central administration which left local distinctions practically unimpaired. The prolonged influence of the Pax Britannica, the slow but steady example of British rule and administration, had gradually caused the seeds of a sense of unity to germinate. Slowly and gradually new conceptions of India as an entity began to grow. Suddenly, as when the first green shoots of spring pierce the secretive crust of the earth and reveal to the eye what has long been of hidden growth, the sense of Indian unity burst into the outer consciousness of the peoples of India.

Politically the idea became a practical issue for the Indian rulers with the creation of the Chamber of Princes the very essence of which was to bring out the fundamental bonds between themselves. The preparation for the Round Table Conference completed the issue by raising the question of interwoven interests between British territory in India and the Indian States. The unanimous utterances of India's rulers have shown that they are alive to, and accept, the conception of a Greater India, in which there is dignified room for their States as well as for the other provinces and territories.

The political conception of a united India has for its counterpart the appreciation of economic oneness. It is not altogether a new feature. Indian economists have long outlined their schemes on its basis. But the impetus given to the general conception of close ties between the various parts of India is crystallizing into a practical view of Indian economics as primarily an internal affair, and only thereafter a question of foreign trade relations. It is this conviction which is about to alter the foundation of Indian economic progress, which had hitherto been primarily a matter of foreign trade. It is the realization of these new ideas and the conscious endeavours towards their rapid achievement which are being made by rulers and statesmen

in the Indian States which warrant the assertion with which this article opened.

CAPITAL, CONTROL AND MANAGEMENT.—If British interests are to play a substantial part in the future development of the Indian States, they will have to realize that the conditions upon which their co-operation will be welcomed are not the same as those which have ruled their relations with other countries, such as those of the New World. In those countries capital as well as technical skill and managerial experience were almost completely lacking. British or other foreign enterprise had to supply all these, and such not only for the final processes of actual manufacture, but for all the initial processes of exploration and "proving." As a result complete control rested with the foreign interests, and since they had assumed all the risks, the bulk of the direct profits, quite properly, fell to them. This almost complete dissociation of the foreign and the indigenous interest in the development of countries has not proved altogether satisfactory. The absence of a national stake in such enterprises has, in times of stress, facilitated, if not actually provoked, ruthless action by the governments of such countries against what appeared to them as "mere alien interests." On the other side, foreign political intervention has sometimes resulted from too exclusively foreign development of a country.

So far as the latter danger is concerned, the Indian States are protected by their special relations with the British Crown against any such eventuality. There are, however, other objections on their part against the uncontrolled admission of foreign capital or enterprise. It is a very proper part of Indian policy that an outlet should be found in the development of Indian resources for that increasing element of the Indian upper classes which is acquiring high professional or technical competence, and which is now all too frequently reduced to the narrow outlets of government service or the sterile paths of professional politics. It is not only on the lower rungs of the economic steps that

Indians seek a foothold, but on all of them, right to the top. That they may still be deficient in experience they do not forget, and they correspondingly welcome co-operation with the trained European elements. What they do not admit is that they should be barred from any particular posts. And since management and personnel tend to follow control, and control ultimately rests with capital, the problem of control and capital is not without a very tangible meaning for those who guide the destinies of the Indian princedoms.

Fortunately the Indian States present, also in this question of capital, that "outstanding feature without precedent or analogy elsewhere" which the Simon Report so aptly describes. Far from leaving the risks of exploration to the hazard of private enterprise, many of the States have spent vast sums in organizing proper services to explore and develop their natural resources. In several instances they have actually declined or left in abeyance outside applications for exploring concessions. Even in the expensive matter of "proving" and testing the possibilities in practice, they appear prepared and able to spend their own capital. Thus they will be able to reap the great advantages of keeping the control in their own hands until such time as outside co-operation can be invited on the basis of definitely ascertained facts and the equitable shares in prospective profits more nearly decided. What is more, they expect in this way to retain such a stake in the ultimate enterprise as will carry with it sufficient control to protect those national interests of employment to which reference has been made.

In all these matters much remains to be done, and correspondingly great is the scope for those British interests which are able and willing to enter into this field of promising activity with an appreciative understanding of Indian aims and interests. The problems to be solved are those of co-operation between Indian and British capital, Indian and British management, Indian and British personnel in the building up of new industries in India. The





Indian States fully realize that their need for experienced advice and technical assistance will become greater and more varied as their schemes become more fully developed. They well appreciate that by sharing the burden of the labour as well as the benefits of ultimate success with British interests, their own advantage will be best served. In the entrancing prospect of constructive activity on a vast scale, the strong loyalty which binds the Indian Princes to the British Crown, the deep affection which links them with Britain, and the honest appreciation with which all thinking Indians regard the achievements of this country in its relations with India, will ensure to all British men of ability, understanding and goodwill a noble and fruitful opportunity to harness their best forces to the task of developing the immense resources of the Indian States as an integral part in the economic progress of a united Greater India.

